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**INTRAPRENEURSHIP IN NORTH WALES
POLICE**

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ABSTRACT

Economics and business literature suggest that for markets to operate at their maximum level of efficiency, there is an overwhelming need for entrepreneurial activity. There has, in recent years, seen the emergence of a public sector entrepreneur, working within the quasi-markets of the modern public sector to follow this drive for maximum efficiency, but unlike the private sector, the public sector has been considered to punish failure and not reward entrepreneurial activity enough for such "intrapreneurship" to thrive.

Specifically, within the public sector in the UK, the Police sector has been considered especially inhospitable to entrepreneurial activity, from its intransigent command and control culture and highly regulated environment. However there is a growing evidence base that, despite this inhospitable environment, cultures are changing and frontline, middle and senior manager police officers and staff are developing intrapreneurial activities. North Wales Police is one such force, and its senior managers are public in their pride in creating an intrapreneurial culture to thrive.

This paper examines the reality of the culture of North Wales Police as it applies to intrapreneurship. It examines the existing literature in this area and its relevance to policing. It then takes the detailed views of key individuals, followed up into a wider study of members of staff, to examine the evidence for whether intrapreneurship is alive and well in North Wales Police, or whether it is simply a misperception of senior management.

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CHAPTER 1

1. INTRODUCTION

1.1 Background To The Research

North Wales Police is a regional police force covering the 6 counties of North Wales. In common with the rest of the Police service across the UK, North Wales Police is involved with a rapidly changing environment, with considerable external pressures to change.

The Police Sector is a subset of the Public Sector. Across the spectrum of what is in 2005 a complex series of subsets, the Police are on the extreme of public – i.e. largely without core competition.

Table 1 – Tomkins' Spectrum of Organisational Types	
1.	Fully Private
2.	Private with part state ownership
3.	Joint Private and Public Ventures
4.	Private regulated
5.	Public infrastructure, operating privately
6.	Contracted out
7.	Public with managed competition
8.	Public without competition

Tomkins (1987)

A conventional wisdom is that public sector innovation is an oxymoron (Borins 2002). This may now be challenged by an uncertain environment, and the performance culture “quasi-competition” that now characterises a great deal the public sector. However, in the light of Tomkins, the Police are perhaps less challenged by competition, therefore what role does innovation have in the Police, and does it relate to the ability of the Police culture to allow enterprise?

The Police have perhaps been typified by innovations in the means and techniques of providing a service – such as DNA/ forensics – which are not the property of one force alone but rather a sector-wide advance. Such technological innovations have

not always come from an enterprise culture, but have had their origins from outside the service in the work of 'for-profit' suppliers and of academic research. Nevertheless, there is a great potential for the impact of an entrepreneur in this sector, and this can take many forms. These may include:-

- Re-engineering internal business processes i.e. efficient information management, training and development etc.
- Using technology to create comparator advantage i.e. mobile data/ GPRS
- Using technology and new processes to meet external needs i.e. web access to rich community safety information
- New organisational partnerships to improve 'joined up' service delivery
- New means to generate income and/ or make efficiency savings

The leadership of North Wales Police (NWP) known, as ACPO –an acronym for Association of Chief Police Officers – is a term used for the senior management of a Police force. It includes in NWP the Chief Constable, Deputy and Assistant Chief Constables, and Director of Finance and Resources. This leadership has placed a very strong emphasis on empowerment and devolvement of decision making and budget to the lowest possible level within the organisation. This has been with the main reason of stimulating enterprise among the widest possible part of the workforce, and improving the sensitivity of NWP's service to local communities and local needs. There has been a considerable range of projects that could be classed under these areas:

- The creation of a Driver Training School established on business lines, marketing driver training courses to other Police Forces and Public Sector organisations, generating income and becoming self-funding
- The development of a radically – different model of data management and delivery (project Aquarius) simplifying 27 systems into 3 and creating a situation where officers have access to data in a mobile environment via Personal Digital Assistants and Data Tablets.
- Originating and leading the development of DangerPoint, a Safety Education Centre for children and young people in North Wales, an innovative solution to educating communities about community safety, road safety and personal safety.

The language spoken by leaders of North Wales Police is that of culture change, devolved decision making and having the courage to develop indigenous projects, processes and changes rather than accepting the status quo, or waiting for a solution to be grafted on from the Home Office or other external institutional drivers. There certainly does seem to be an increase in performance, with North Wales Police's performance rising in the last year to being one of the 10 best forces in the UK and the best in Wales (Her Majesty's Inspector of Constabulary 2005). Whether this is a direct result from an enterprise culture is a moot point.

Indeed, however strong the quoted examples are, however, the question still has to be answered; is North Wales Police a genuinely enterprising culture, or is the talk from ACPO leaders just aspirational. Are the examples above merely accidental or non-typical?

Of all the influences on North Wales Police's external environment, the strong relative influence of political and legal factors may be seen to inhibit the propensity to embrace self-generated change (Parker and Bradley 2000). Much of the current change is being imposed upon the Police Service (i.e. the current major work driven from the Home Office to rationalise forces, which may have one of the most profound impacts on the management and organisation of the Police sector for many years). How effective is NWP in generating its own internal drivers for change; its enterprise culture?

1.2 Research Question

The fundamental question this study addresses is whether the enterprise culture within North Wales Police is universal, sporadic or a chimera. What do members of senior management, middle management and other staff, police officers and police staff, think about this? What can be learned from the literature about how organisations in general, and specifically in the public sector and the Police, inculcate enterprise? What are the drivers, what are the barriers?

In summary - how can intrapreneurship be beneficially developed within North Wales Police?

Aim(s) of the investigation:

1. Understand contemporary thinking regarding intrapreneurship (via a review of the current literature on intrapreneurship, identifying the key aspects of intrapreneurship that might influence the culture of North Wales Police)
2. Investigate how intrapreneurship is articulated within North Wales Police
3. Recommendations on how intrapreneurship can be beneficially developed within North Wales Police, based on findings from 1-3 above.

1.3 Justification for the Research

As has been discussed in section 1.1, enterprise, or what will be consistently referred to as intrapreneurship for this study, is a critical issue for what have now been termed the 'new public services'. The performance measurement and related success of North Wales Police is increasingly a function of its ability to change, respond to a rapidly changing set of challenges and environments, and through this be responsive to public need. Organisations can change because they are made to by external forces, in NWP's case the political will or changes in policy or law, and/ or they can change because they want to and have the ability, culture and resources to do so.

The need to understand intrapreneurship as an academic concept referring to the private sector has recently gained in importance (Dess et al, 2003; Stevenson and Jarillo, 1990) and has resulted in a number of academic frameworks being developed. These can be seen as a factor of the increased need for enterprise as a critical success factor within organisations public and private (Hornsby et al 2003). Through this theory development there has been identified a strong and relevant link from intrapreneurship to the area of innovation, which this study therefore also addresses in parallel.

In the private sector, the rapid development of technology in recent years, especially information technology, has provided opportunities for firms to launch new products, processes and do business in new ways. Competitive advantage has been a driver for both innovation and enterprise (Borins, 2002), and the Schumpeterian process of competitive and creative destruction has become intense, with 'innovate or die' being a typical viewpoint.

Despite the dated argument expressed previously that innovation and enterprise in the public sector is an oxymoron, there has been such considerable changes in the way that public sector organisations operate in recent years that, as Boyett (1997) suggests, there is really no suggestion that the quasi-markets of current public sector should be any different to private sector markets where the economics literature suggests that for them to operate at their maximum level of efficiency there is an overwhelming need for entrepreneurial activity.

Therefore this study has to be seen in the wider context of changes in Private and Public Sector Management in the UK and abroad. These changes involve the shift from a bureaucratic and mechanistic culture towards a more market-based economy employing many of the features of the private sector (Parker and Bradley, 2000). The rise of what is now known as 'New Public Management' is clearly a significant area of interest for research, with the Police sector in particular, as this has been identified as one of the most important trends within Western governments, yet as Leishmann et al (1995) suggest, its impact on the Police service in the UK has been belated and limited.

The challenge for government is to find ways of making public services efficient while also protecting standards and equity of distribution; the reasons why such services still operate in the public domain. Managers need supportive environments in order to meet this challenge (Maddock 2002). There is not always a common philosophy among those driving change; indeed the change agenda has been stymied by a lack of understanding within government of what change management is (Marquand 1999).

In summary, this study examines an emerging area of theory, in intrapreneurship in general, in the specific context of public sector management, and within the Police sector. There is little literature on how intrapreneurship applies to the public and police sectors, therefore it is hoped that the study will shed an interesting light on the applicability of private sector theories into the more entrenched end of the public sector. It is also important to examine how this concept of intrapreneurship relates to innovation, which is a more commonly recognised and studied phenomena, and how and why these both thrive or wither within the change environment of new public sector management.

1.4 Methodology

It is proposed that the research takes an interpretivistic approach to better understand how the reality of intrapreneurship within North Wales Police. The research will be based on a combined approach.

Inductive techniques will be used to build theory and compare this to current academic theories on intrapreneurship, in particular to understand the senior management view on intrapreneurship, the organisational barriers and drivers to developing intrapreneurs, and the opportunities for future developments and improvements.

The research strategy will include semi-structured interviews, and a subsequent survey to ensure triangulation. The semi-structured interviews will be used to identify key issues for wider investigation in the questionnaire part of the survey.

To support the research strategy the following data collection methods are to be employed:

A detailed review of academic literature, reference books, journal articles, review of secondary literature from the library and a review of material available via the Internet, e.g., Emerald. This stage of the project will be used to understand contemporary thinking on intrapreneurship. In addition it will also inform the design of the semi-structured interviews, the case study as well as the questionnaire.

A small number of semi-structured interviews will be undertaken. The purpose of these interviews is to investigate North Wales Police's current approach to developing and incubating intrapreneurship. This data will provide essential direction for the design of a questionnaire as well as providing valuable qualitative data. The semi-structured interviews will provide an opportunity to build a detailed and thorough picture of the leadership view on intrapreneurship. It is considered that a semi-structured interview will encourage senior managers to reflect on the relevant questions in a way that a questionnaire could not. These interviews will be conducted face to face.

Interviewees will include the Chief Constable, the Director of Finance and Resources, a Divisional Commander and the Head of Commercial Development. Others will form a representative set of views from across NWP, up and down the hierarchy, and within Police Officers and Police Staff.

The data obtained from the semi-structured interviews will be used to inform the design of the questionnaire. The questionnaire will be aimed at senior, middle and junior management and others who are identified as the typical 'breeding ground' for current and future intrapreneurs. A purposive sample of Police officers and Police staff will be drawn. The questionnaire will be piloted to ensure effectiveness and, to further ensure reliability, will be anonymous to encourage respondents to respond truthfully.

1.5 Outline of the MBA Dissertation

Chapter 1 – Introduction

In this section, the research question, background and objectives are discussed and presented, with an introduction to the research strategy and the key definitions used.

Chapter 2 – Literature Review

In this section, there is a review of current academic theory as it impacts on the research question and objectives, drawing conclusions and a conceptual model that will impact on the findings, and the development of the primary research instruments.

Chapter 3 – Methodology

This section outlines the justification for the chosen research strategy, the design and development of research instruments, how the research has been undertaken and an analysis of the possible limitations of the research.

Chapter 4 – Findings

This presents the findings of the research.

Chapter 5 – Conclusions and Implications

This section offers an evaluation of the chosen approach, conclusions about each research objective, and pointers to future research.

Chapter 6 – Recommendations

This presents recommendations to North Wales Police for how they can use the results of the research to change/ improve the organisation.

1.6 Definitions

Entrepreneurship

This has been defined as :

“...the process of uncovering and developing an opportunity to create value through innovation and seizing that opportunity without regard to either resources (human and capital) or the location of the entrepreneur – in a new or existing company.”

(Churchill, 1992), and an Entrepreneur as: “a person who habitually creates and innovates to build something of recognised value around perceived opportunities.”

(Bolton and Thompson, 2000).

Intrapreneurship

Intrapreneurship has been defined as the articulation of entrepreneurship within the context of an organisation (Hisrich and Peters, 1998). It is a process by which individuals inside organisations pursue opportunities independent of the resources they currently control (Stevenson and Jarillo, 1990); as doing new things and departing from the customary to pursue opportunities (Vesper, 1990) and as the creation of new organisations by an organisation, or as an instigation of renewal and innovation within the organisation (Sharma and Crisman, 1999).

Innovation

Nohria and Gulati (1996) define innovation as “very broadly to include any policy, structure, method or process, product or opportunity that the manager of the innovating unit regards as new”.

1.7 Summary

This chapter introduces the research issue and question. It shows the justification for the research, an introduction to the methodology, definitions of key terms, and an outline of the report structure. On this basis the dissertation can proceed with a detailed description of the research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This literature review is designed to explore the relevant academic theory relating to Intrapreneurship, in general, as it applies to the public sector, and then as it applies to the Police as a specific sub-sector. The review will result in the design of a conceptual model which will then act as the basis for the primary research instruments for this study.

This review will outline the parent discipline of Entrepreneurship, and then continue with a detailed analysis of Intrapreneurship in general, in the public sector and in the Police itself. It will examine the environmental (external) and psychological (internal) conditions that might impact upon intrapreneurship. In terms of the external environment, it will examine the cultural issues around new public sector management.

The review will then explain the link to the academic area of Innovation, with an explanation of the dynamics of this in general, and in the public sector and the police specifically. This will be followed with a discussion about current theory as it impacts on the environmental and psychological issues of Innovation.

Finally the review will link these areas together into a conceptual model, the theoretical construct that it the context for the primary research.

2.2 Parent Disciplines

2.2.1 Entrepreneurship

Entrepreneurship has been defined as:

“...the process of uncovering and developing an opportunity to create value through innovation and seizing that opportunity without regard to either resources (human and capital) or the location of the entrepreneur – in a new or existing company.”

(Churchill, 1992),

An entrepreneur has been defined as:

“...a person who habitually creates and innovates to build something of recognised value around perceived opportunities.” (Bolton and Thompson, 2000).

Entrepreneurship is an emerging and evolving academic area where research has been expanding its boundaries by exploring and developing into links with innovation and the characteristics of individual entrepreneurs and entrepreneurial organisations. The scope and dimensions of this area of academic study will be described within this section.

2.2.2 Innovation

Researchers and practitioners have defined innovation in several different ways. One of the more common debates concerning the definition of innovation is whether innovation should be regarded as a process or a discrete event (Cooper, 1998). A narrow definition views innovation and invention synonymously – both terms refer to creative processes involving the application of existing ideas to create a unique solution to a problem (Duncan, 1972). However in practice it is known that many firms achieve competitive advantage not by invention, but by clever use of existing processes, products and technologies, clouding the relationship between invention and strategy.

A broader interpretation of innovation specifies that the first use of an idea by a given set of organisations with a common goal constitutes innovation (Kimberly and Evanisko, 1981). This “first mover” approach has been subsequently modified to a

contrived approach as to whether the adopter acted relative to others: Rogers (1983) proposed the first 2.5% of adopters of a given innovation were innovators.

Most current researchers define innovation as “*any idea, practice or object that the adopting individual or organisation regards as new*” (Damanpour, 1991). From this perspective, the newness attached to an innovation remains a matter of perception. The organisation has uncertainty associated with the evaluation of the long-term effectiveness of adopting the innovation (Robertson and Gatignon, 1986).

Nohria and Gulati (1996) define innovation as “*very broadly to include any policy, structure, method or process, product or opportunity that the manager of the innovating unit regards as new*”.

2.3 Intrapreneurship

2.3.1 Introduction

Intrapreneurship, or corporate entrepreneurship, is now an accepted subset of the literature exploring entrepreneurship, examining its impact within existing organisations and the subsequent effect on performance. The need to understand intrapreneurship has been gaining in importance in recent years (Dess et al, 2003; Stevenson and Jarillo, 1990) and has resulted in a number of frameworks being presented to the literature (Colvin and Slevin, 1991; Pinchot, 1985; Antonic and Hisrich, 2003). There is also a growing identification of the need for intrapreneurship within organisations (Hornsby et al 2002; Ireland et al 2001).

Intrapreneurship is held to promote entrepreneurial behaviours within an organisation (Echols and Neck, 1998).

2.3.2 General dynamics of Intrapreneurship

Intrapreneurship has been further defined in several ways; as a process by which individuals inside organisations pursue opportunities independent of the resources they currently control (Stevenson and Jarillo, 1990); as doing new things and departing from the customary to pursue opportunities (Vesper, 1990); as a spirit of entrepreneurship within the existing organisation (Hisrich and Peters, 1998), and as creation of new organisations by an organisation, or as an instigation of renewal and innovation within the organisation (Sharma and Crisman, 1999).

Table 2 offers a structured view of the main models of intrapreneurship evolving in the academic literature in recent years.

Table 2
Key Intrapreneurship Models

Literature Source	Key Features	Key Variables	Value Added	Potential Weaknesses
Powell and Bimmerle (1980)	Focuses on the venture creation decision making process with concentration on three key aspects – entrepreneurial descriptors, and precipitating and venture-specific factors	Entrepreneurial descriptors: traits, knowledge and experience Precipitating factors: dissatisfaction, opportunity, initial encouragement Venture-specific factors: evaluation, support	Categorises the entrepreneurial characteristics into distinct divisions seeking to highlight complexity in the process	No evaluation of the entire evaluation process
Miller and Friesen (1982)	Examines environmental, information processing, structural and decision-making variables	Scanning Concentration of authority Planning horizons Resources Control	Developed equations for entrepreneurial activity in conservative and innovative firms	Little acknowledgement of behavioural variables
Covin and Slevin (1991)	Focuses on organisational behaviour with consideration for the context as well as the individual	External variables: industry lifecycle, technological sophistication Strategic variables: mission strategy, business practices, competitive tactics Internal variables: culture, resources	Consideration of performance	Only takes a behavioural view of entrepreneurship
Cunningham and Lischeron (1991)	Entrepreneurship as a reiterative process – focusing on personal values, opportunity identification, planning and acting, and reassessing change	Recognising opportunity Reassessing need for change	Recognises the need for feedback and self evaluation	No output variables stated in the model
Hornsby et al. (1993)	Focuses on organisational and individual characteristics, precipitating event, decision to act, business planning, resource availability, ability to overcome barriers	Business feasibility Ability to overcome barriers Decision to act entrepreneurially Precipitating event	Emphasises the multidimensional and interactive nature of intrapreneurship	No evaluation of the entire intrapreneurship process
Morris et al. (1994)	An integrative model of entrepreneurial inputs and outputs	Organisational performance: value creation, new products services or processes, profits/benefits, revenue growth	Process perspective and the variable nature of entrepreneurship with innovation as a possible output of the entrepreneurial process	View of entrepreneurship and innovation as a single process
Baum et al. (2001)	Focuses on traits, competencies, motivation, competitive strategies and the environment	Individual traits Management competencies	Categorises the entrepreneurial characteristics into distinct divisions seeking to highlight complexity in the process	No evaluation of relationships between variables

Table 2 illustrates how an understanding of the dimensions of entrepreneurship has evolved in the literature. Early studies such as Powell and Bimmerle (1980) have suggested that entrepreneurship is initiated by three sets of attributes, namely entrepreneurial descriptors, precipitating factors and venture-specific factors. Entrepreneurial descriptors include individual traits, personal fitness, knowledge and skills. They suggest that if enough of these factors are present in the proper balance, then the individual can be identified as a prime candidate for entrepreneurship. Embarking on an entrepreneurial venture, however, depends on precipitating factors such as dissatisfaction, encouragement and recognition of an opportunity.

Cunningham and Lischeron (1991) adopt a different approach and have sought to emphasise the need for an iterative process, where there is constant re-evaluation of the individual, as well as future opportunities, the entrepreneurial actions undertaken, and the potential need for change. Hornsby et al's (1993) model differs from both of these two models, as it highlights the need for a participating event that provides the stimulus for entrepreneurial activity. These events may include a change in management, a merger or acquisition, the development of a new procedure, economic changes, technological changes and consumer demand.

Other researchers have concentrated on categorising and measuring the major traits and variables involved in entrepreneurship (Baum et al 2001; Powell and Bimmerle, 1980). Covin and Slevin (1991) have classified these elements into three groups: external variables, strategic variables and internal variables. Contrasting this, Miller and Friesen (1982) have concentrated on developing a more scientific approach identifying entrepreneurial personality traits. Baum et al (2001) have taken this one stage further by measuring the strength of their relationship with venture growth.

The scope of intrapreneurship includes not only the formation of new 'internal' business ventures, but also other innovative activities and orientations such as new products, services, technologies, processes and competitive postures (Antonic and Hisrich, 2003), who propose eight dimensions of intrapreneurship: –

1. New Businesses and Ventures

The creation of new businesses is an accepted characteristic of intrapreneurship (Stopford and Baden-Fuller, 1994). These ventures can exist within or outside the existing organisational domain (Sharma and Chrisman, 1999).

2, 3, 4. Product, Service and Process innovation

Here, intrapreneurship can relate to new product development, product improvements, and new processes as separate elements. Covin and Slevin (1991) considered one part of the “entrepreneurship posture” the extensiveness and frequency of product innovation and the related tendency of technological leadership.

5. Self-renewal

This has strategic and organisational change connotations and includes a redefinition of the business concept, reorganisation, and the introduction of system-wide changes for innovation (Zahra, 1993). Muzyka et al (1995) believe the organisational imperative to continual renewal of its businesses as crucial characteristics of an entrepreneurial corporation.

6. Risk – taking

This includes the quick pursuit of opportunities, fast commitment of resources and bold actions (Lumpkin and Dess, 1997), and Mintzberg (1973) views risk taking and decisive action as elements of entrepreneurship. Risk - taking is a critical issue for intrapreneurs (Covin and Slevin, 1989) although it might be identified in the public sector context as the ability to quickly pursue opportunity and commit resources.

7. Pro-activeness

The concept of pro-activeness is how organisations attempt to lead, not follow competitors in key areas such as the introduction of new services, operating technologies and administrative processes (Covin and Slevin, 1986).

8. Competitive aggressiveness

Antonic and Hisrich's terms of reference were private sector, and here aggressiveness and pro activeness can be considered two distinct dimensions of organisational entrepreneurship, although in the context of the public sector the competitive element may be present (Higher Education) in the Police there is much less of a direct competitive element. This may be relevant however in certain more competitive aspects such as income generation.

2.3.3 Intrapreneurship issues in the Public Sector

Specifically within the public sector, Boyett (1993) has offered the following the definition of a public sector intrapreneur:

"Entrepreneurship occurs in the public sector where there is an uncertain environment, a devolution of power, and at the same time re-allocation of resource ownership, to unit management level. It is driven by those individuals, particularly susceptible to the 'manipulation' of their stakeholders and with a high desire for a high level of social 'self-satisfaction', who have the ability to spot market opportunities and who are able through follower 'manipulation' to act on them."

Public Sector entrepreneurs will be expected to display non-routine managerial behaviour. In the current public sector environment described by a move rapidly away from monopoly position, the public sector entrepreneur will spot signals of potential change and opportunity. (Boyett 1997).

Boyett's model suggests that there are critical environmental issues for the existence and flourishing of intrapreneurial activities within public sector organisations. These are the external environment, internal environment, and the individual environment.

Thompson (2004) has suggested that the environment for established organisations in all sectors is currently dynamic, turbulent and uncertain – *"continuous emergent change is a must; periodically more transformational change will be required...all this needs entrepreneurship within the organisation"*, fulfilling the defined needs of a 'friendly' culture for intrapreneurs from Boyett's definition.

White (2000) points out that the most prevalent trends in the private sector are towards continuous and pervasive change, and that close parallels can be drawn to the public sector, where there are broadly similar environmental challenges to respond to, with uncertainties due to dramatic change in the political, economic and cultural world (Stewart and Kimber, 1996). Private and voluntary sector businesses will increasingly be involved in the provision of public services. Lowdnes and Skelcher (1998) claim that public sector agencies are now expected to enact new relationships and partnerships, think and act strategically, network with other agencies, manage resources effectively, redefine boundaries of systems; and govern for accountability and transparency. This needs new ways of working and, more importantly, offers new opportunities for public organisations to innovate and act entrepreneurially.

Some public sector organisations are aware of the practical processes to implement change and in particular the need to focus on developing and managing people (Lovell, 1995).

Thompson suggests that this will be articulated by either an entrepreneurial strategic leader, or the strategic leader will be able to ensure the organisation is able to recognise, encourage and reward entrepreneurial employees.

2.3.4 Intrapreneurship issues in the Police Sector

Most Police organisations have to date been illustrative of Weber's classical bureaucracy which has created a very strong and deeply rooted role culture (Harrison, 1986). Going back to 1829, the service is steeped in tradition, and consequently organisational and cultural reforms are likely to be a challenge.

Why would changes, which might be driven by intrapreneurial action, be needed? Although public attitudes towards police are generally positive, (Dowler, 2002) it is evident that the social context of policing is changing, and the Police need to satisfy a divisive and fragmenting community (Mawby, 1999).

The Police as a sub-sector of the broader public sector have changed more slowly than other sub-sectors (Health, Education) and Barton (2003) suggests that this is because of the unique Police occupational culture. Imposed change has been met by protest from officers, i.e. the Police Reform Bill 2002, and has subsequently been watered down. Crank (1998) has suggested that police officers carry a profoundly individualistic perception of themselves, have a loathing for bureaucratic controls and resist "management" attempts at greater monitoring and control.

There has certainly been greater scrutiny of Police Forces in the past decade. In 1995 the Audit Commission was given responsibility to monitor Police performance via key performance indicators. In addition HM Inspectorate of Constabulary was given a wider role to examine efficiency and effectiveness. In 2002 the Police Standards Unit was established within the Home Office to monitor individual Force's performance against government targets.

Barton suggests that Policing, by its nature, results in a strong culture of solidarity and isolation resistant to change and suspicious of the purpose of reform. Turnbull (1992) identifies work that is dangerous and/or skilled often produces a high degree of 'emotional involvement' in the work tasks.

The question this poses is does the relative independence and autonomy that Police Forces desire at a macro level inhibit internally-generated intrapreneurship as it might inhibit changes imposed from the outside?

2.3.5 Internal and Individual environmental conditions for Intrapreneurship

2.3.5.1. Internal Environment

Organisational culture has an important impact on intrapreneurship; Slevin and Covin, 1990), Kotter and Heskett (1992). They argue that there is a difference between superficial culture (visible behaviour patterns) and depth culture (shared values and standards). Depth culture is difficult to change. They also argue that, although the key elements of risk taking, proactivity and innovation are not sufficient on their own to secure success; they need the appropriate culture and organisational structure.

Organisational culture has been defined in different ways in the literature – perhaps best understood in layman’s terms as “the way we do things around here”. It reflects the norms and deeply rooted values and beliefs that are shared by people in an organisation. Organisational culture can affect levels of intrapreneurship and innovation through socialisation processes that influence workplace behaviour, and through structures, policies and procedures that are shaped by the basic values and beliefs of the organisation (Martin and Terblanche, 2003). Slevin and Covin (1990) emphasised the importance of an appropriate organisational culture in developing effective entrepreneurial and innovation behaviour to address market dynamics.

“New public management” has become a major international trend which is critically influencing the culture of public sector organisation. The elements within this include (Hood, 1991):

- hands-on professional management;
- explicit standards and measures of performance;
- greater emphasis on output controls;
- shift to disaggregation of units in the public sector;
- shift to greater competition in the public sector;
- stress on private sector styles of management practice;
- stress on greater discipline and parsimony in resource use.

Today's public sector workers have not only been given a new “ownership” of resources but also a greater freedom to generate additional resources from within and external to the core business.

2.3.5.2. Psychological/ Individual Environment

Enterprise, entrepreneurship and intrapreneurship are matters that tend to be automatically associated with a person (Janson and van Wees; 1994), however it is not necessarily about personality, but skills too. The implication from Leavitt (1989) is that entrepreneurship has more to do with people than systems. Enterprising people translate “what is possible” into reality (Kao, 1989) or something that is a simple, ill-defined idea into something that works (Ket de Vries, 1997).

Boyett's (1997) proposed definition of public sector entrepreneurship suggests the type of individuals who may drive the process:

“Entrepreneurship.. is driven by those individuals, particularly susceptible to the “manipulation” of their stakeholders and with a high level of social “self-satisfaction”, who have the ability to spot market opportunities and who are able through follower “manipulation” to act on them.”

Understanding entrepreneurial attitudes is a critical factor in comprehending the link between the entrepreneur and the innovation process (Kuratko et al, 1997). According to Shaver and Scott (1991, p39):

“Economic circumstances ...; social networks ...; entrepreneurial teams ...; marketing ..., finance ...; even public agency assistance (are) important. But none of these will, alone, create a new venture. For that we need a person, in whose mind all the possibilities come together, who believes that innovation is possible, and who has the motivation to persist until the job is done. Person, process, and choice: for these we need a truly psychological perspective on new venture creation.”

The motivation of the entrepreneur is one attitude that has been examined in the literature (Stewart et al, 2003). Gilad and Levine (1986) assert that individuals develop entrepreneurial tendencies because of negative situational factors, which can motivate an individual to making the decision to become an entrepreneur.

In addition, entrepreneurs are driven by both financial and non-financial goals. Evidence suggests that monetary gain often features second to the need for achievement (McClelland, 2002). Entrepreneurs that operate within organisations

tend to focus on the need for achievement, searching more for challenge and autonomy than financial gain (Burns and Kippenberger, 1988). Maddock (2002) has reinforced the need for incentives that encourage risk – taking for public sector staff. Traditional public sector incentives were assumed to be job security, routine promotion and pensions, and most public bodies continue to offer reward for conformity rather than innovation. Joined- up incentives need to be designed, as praise without tangible reward can be irritating and increased pay for those working in hostile environments is not always tempting. Incentives need to reward open and inclusive behaviour among staff, and be part of a whole-system approach to incubating intrapreneurship.

An entrepreneurial vision is an indication of what the organisation expects to achieve in the future. It is about seeing what is not there (Carland et al, 1996). In other words, the entrepreneur goes beyond recognising opportunities; rather they have the ability to envisage a change in the environment in order to create opportunities (Ensley et al, 2000), requiring imagination and intuition. Kuratko et al (2001) suggest that a meaningful vision is sensible, easily understood and creates cultural glue. The most effective vision highlights an organisation's commitment to product, process and market innovations. Talented entrepreneurs use the vision to energise employees, help them to meet the challenges that face them, and to facilitate their attempts to achieve more than they thought possible as they strive to help the firm achieve its vision.

Kotter and Heskett (1992)'s research identified 'culture' as a key variable for how managers within organisations can become entrepreneurial managers. They make the distinction between "superficial culture" i.e. visible behaviour patterns and "depth culture" i.e. shared values and standards, with the latter particularly hard to change. There are barriers to intrapreneurs in many organisations (Thomson, 1999).

Thompson (2004) has identified several characteristics that might help define or identify an entrepreneur: talent, temperament and technique, character, and enablers (i.e. advisors and supporters). Bolton and Thompson (2003) have offered a framework for defining entrepreneurs around a six interdependent character basis (Team, social, creativity, focus, advantage, and ego).

This has been subsequently validated by research, which has also brought up the importance of temperament as a driver of the start of the entrepreneurial process. This suggests that although entrepreneurs may subsequently be supported by enablers, but poses the question of to what extent can temperament be put in place if it is not already there?

Coulson (1999) suggests that there are often training and development omissions in organisations that do not do enough to identify and encourage the intrapreneur. There may be opportunities in the areas of self-assessment of enterprise potential among others. His research also suggests that traditional tools and techniques may not be relevant here, and that individual and corporate aspirations need to be aligned.

There can be a discord between behaviours, such as entrepreneurship, that a company appears to encourage, and those which are in fact rewarded by remuneration or promotion (conformism). Successfully implemented, rewards can be a strong motivator for intrapreneurs, as they can be for traditional entrepreneurs too (Kuratko et al 1993). It has also been identified by Jansen et al (1994) that the ability to fail by an 'understanding environment' can be as important as knowledge of the business and skills sets in being or becoming an intrapreneur.

According to Beer et al (1992), local behaviour will not change "automatically" if head office make announcements about change programmes, and it later emerges that only the formal "superficial" organisation has been changed. In fact, Beer et al found that real change takes place in real, concrete situations rather than as a reaction to 'management abstractions'.

2.4. Intrapreneurship and Innovation

An understanding of the separate but related field of study of innovation is important to fully understand the impact of management and culture on intrapreneurship, but also to best understand the way in which individuals often personally describe the act of intrapreneurship.

There are a variety of different models each contributing towards a holistic understanding of intrapreneurship, innovation and the links between the two. Innovation is posited by Antonic and Hisrich (2003) as close but not the same thing as the intrapreneurship concept. They suggest that it is difficult to find a common definition of innovation. Gopalkrishnan and Damanour (1997) reviewed innovation research in different areas such as economics, organisational sociology and technology management, and found that innovation is commonly viewed as one of the key means of adapting to change as well as creating and adopting something new. But they found that *“researchers within each discipline conceptualise innovation very differently, and have very different views of its impact on an industry or a firm's productivity, survival, growth and performance”*. Wolfe (1994) found similarly that innovation has a complex, context-sensitive nature. They are not the same thing although they are linked; they share a focus on newness, and emergent products, technologies, activities and orientations.

The conceptual relationship between entrepreneurship and innovation has been discussed in terms of the economics of innovation (Sundbo 1998). Schumpeter (1934) was the first to attempt a linkage, viewing the entrepreneur as innovator. Entrepreneurship is seen in this context as a creative act, with the creation adding value to the individual and community, and based on perceiving and capturing an opportunity (Johnson 2001). Bygrave and Hofer (in Legge and Hindle, 1997) held similar views, regarding entrepreneurship as a dynamic process and a unique event. Legge and Hindle (1997) believed that people who lead teams and organisations to introduce innovations are entrepreneurs.

Innovation can be described as the act of entrepreneurs, how they react to their environment and enhance their operations. Innovation, to reference Nelson and

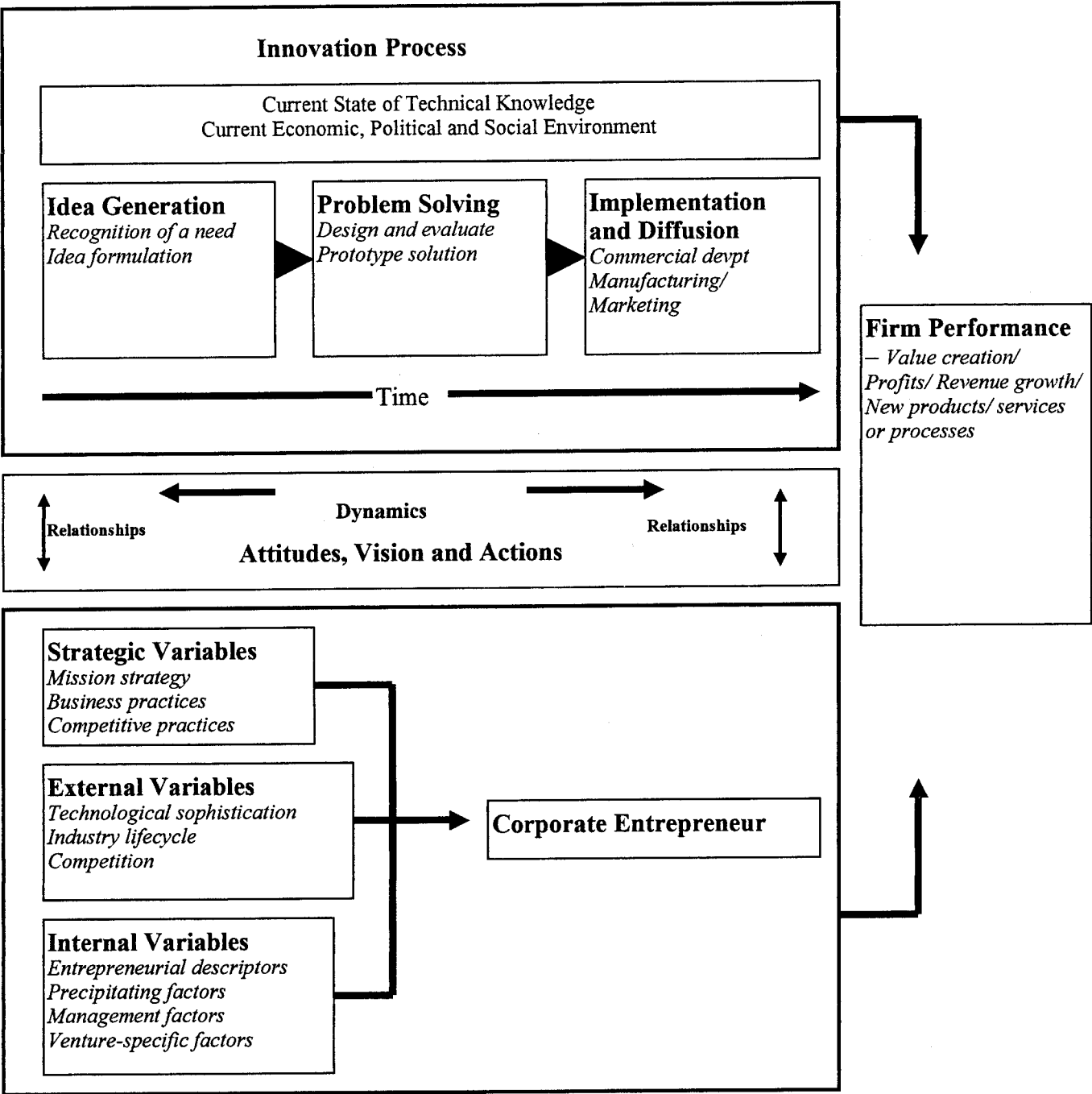
Winter (1982), is a variation from routine decision-making behaviour. Therefore organisations can be one of only two things – innovative or adaptive.

Intrapreneurship is also held responsible for the stimulation of innovation within the organisation through the examination of new opportunities, resource acquisition, implementation, exploitation and commercialisation of new products and/ or services (Kurato et al, 1990; Stopford and Baden-Fuller, 1994). Additionally, Zahra (1991, 1995) states that intrapreneurship includes various attitudes and actions that define a company's ability to take risks and innovate.

Zhao's recent (2005) study of the links between entrepreneurship and innovation shows that entrepreneurship and innovation are complementary, positively related dynamic and holistic processes which interact to help an organisation flourish. Zhao found that, critically, organisational culture and management style are crucial factors affecting the development of entrepreneurial and innovative culture within organisations.

McFadzean, O'Loughlin and Shaw (2005) have offered a model (Figure 1) linking intrapreneurship and innovation which shows the critical meeting points between the generation of an intrapreneur and the innovation process as attitudes, vision and actions – very much in the internal, psychological environment. Attitudes include the psychological characteristics, motivation, rewards (financial and non-financial), propensity to risk-taking, willingness to fail, etc. An entrepreneurial vision may be set by senior managers and necessitates an ability in the entrepreneur to envision a change in the environment in order to create opportunities. Entrepreneurial activities consist of social interactions to provoke new opportunities.

Figure 1 Innovation and Intrapreneurship



McFadzean, O'Loughlin and Shaw
(2005)

2.5. Innovation

2.5.1 Introduction

There are enormous differences in the views and approaches about what defines innovation. However, many process models have been presented in the literature suggesting that innovation consists of a variety of different phases: idea generation, research and development, prototyping, manufacturing, marketing and sales (Rothwell, 1994; Knox, 2002; Dooley and O'Sullivan, 2001). Heany (1983) suggests that the least novel and risky form of innovation is to incrementally change the style of a product. At the other end of the spectrum, major innovation is held to have the potential to radically change the marketplace, creating new markets and new industries, which can be highly risky (Brown, 1992; Clegg et al, 2002).

Between these two points, innovation can be defined as a process that adds value and novelty to the organisation, customers and suppliers through the development of new procedures, solutions, products and services as well as new methods of commercialisation (Covin and Slevin, 1991; Knox, 2002).

In conclusion, it can be argued that innovation without entrepreneurship/intrapreneurship is just an aspirational, rather than tangible destination. Therefore the two concepts must be linked together (Pinchot, 1985; Thornberry, 2001; Zahra, 1995).

2.5.2 General dynamics of Innovation

Rothwell’s (1992) taxonomy provides a useful framework for classifying innovation models (see Table 3). He produced a framework that allows the classification of the dominant perceptions of innovation through time.

Table 3 – Key Innovation Models

Generation	Type of Model	Characteristics of Model
First	Technology push model	Simple, linear, step-wise models showing progression from discovery through to the commercialisation of a new product; emphasis is on R&D; little focus on transformation or role of the marketplace
Second	Need pull model	Simple, linear sequential models that focus on the marketplace; innovations developed from perceived or clearly articulated needs from consumers, marketing directs R&D
Third	Coupling model	Sequential models with distinct but interacting stages, contain feedback loops and can include technological push, market pull or a combination of both; emphasis on integration between R&D and marketing
Fourth	Integrated model	Models show an increase in integration between functions and between other companies; show parallel development and increased relationships between R&D, manufacturing and design as well as with customers and suppliers.
Fifth	Systems integrating and network model	Models include fully integrated parallel development; strategic integration with suppliers and strong links with customers; co-development with stakeholders; emphasis on corporate flexibility and development speed, use of expert systems; simulation modelling and computer aided design and manufacturing; collaborative research and marketing arrangements; increased focus on quality; innovation placed at the leading edge of corporate strategy

Rothwell (1992, 1994)

Table 4 presents an analysis of innovation frameworks.

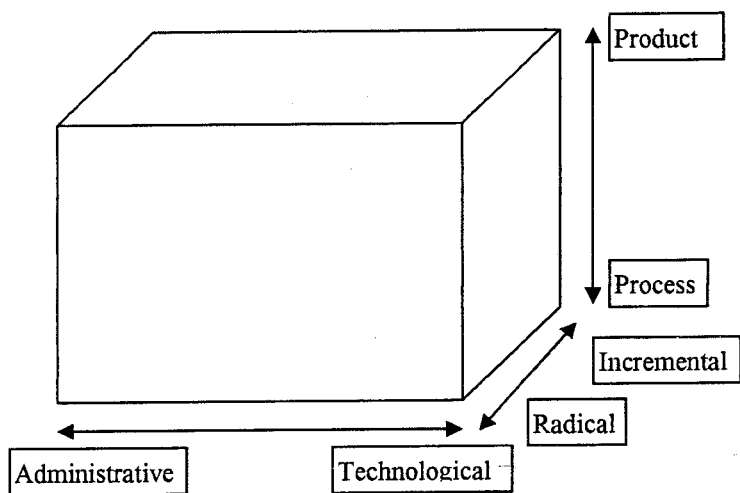
Table 4 – Innovation Frameworks

Literature source	Models key feature	Key variables	Value added	Potential weaknesses
Utterback (1971)	Coupling model incorporating three basic phases; idea generation, problem solving and implementation and diffusion	Multi-stage processes Current economic and social environments Current technological knowledge	Introduces dynamism with consideration of changing technology and needs over time	Fails to recognise the use of personnel, collaboration and networking
Roberts and Fusfeld (1981)	Project based multi stage model; pre-project, project possibilities, project initiation, project execution, project outcome evaluation and project transfer	Multi-stage processes	Consideration of the required roles in the innovation process	First-generation model focusing on technology-push and R&D. No commercialisation and marketing features
Roberts (1988)	Multi-stage model; recognition of opportunity, idea formulation, problem solving, prototype solution, commercial development and technology utilisation and/or diffusion	Multi-stage processes Technology The market	Considers drivers of innovation and dynamism	Fails to recognise the use of personnel, collaboration and networking
Couger (1995)	Stage-dominant linear model; discovery, invention, innovation, output	Multi-stage processes	Presents the relationships between creativity and innovation	Simple, linear model that largely focuses on the stages of innovation rather than the variety of variables that make up these stages
Cooper (1998)	Model shows three dimensions of innovation; product/process, incremental/radical, and administrative/technological	Dimensions: product to process, incremental to radical, and administrative to technological	Suggests that innovations can possess the characteristics of different dimensions. Thus they can be looked at from a broader perspective	Focuses on innovation dimensions rather than processes, functions or networks
Dooley and O’Sullivan (2001)	Three integrated elements; goals/constraints, actions and results	Multi-stage processes	A structured approach to systems innovation to facilitate continuous innovation	Largely focuses on internal processes rather than future opportunities or potential commercialisation processes

Dooley and O’Sullivan’s model considers continuous innovation but it is focused towards internal efficiencies, rather than new solutions or new methods of commercialisation. Roberts and Fusfeld offers a multi-stage process model for innovation, however this illustrates a first generation linear model, highly technology based and overly simplistic. Contrasting this is Cougar’s (1995) framework – a second generation innovation model – which considers market need but doesn’t focus

on technological innovation. These models have been made redundant by integrated models, but even these models (Roberts 1988 etc.) comprehensively investigate the source, characteristics and management of innovation. Cooper (1998) for example, developed a sophisticated, multidimensional model of innovation (Figure 2).

Figure 2 Cooper's Model of Innovation



Cooper posits that technological innovation involves the adoption of an idea that directly influences the output processes. They can be product or process, radical or incremental, whilst administrative innovations includes changes that affect the policies and very social structures of the organisation, which can also be radical or incremental. Product innovation reflects change in the end product or service, while process innovation represents changes in the way organisations produce end products or services (Utterback, 1994). Product innovations have been linked to entrepreneurial organisational forms and leadership styles (Miller and Friesen, 1982), but they can also be nothing more than the organisation's response to the needs of outside customers or stakeholders. Scuilli (1998) found that large, complex, participative organisations adopt product innovation, whilst Rothwell's (1983) research favoured small firms. Process innovation historically seems to favour large bureaucratic firms (Porter, 1980) operating in mature markets with high organisational slack. However as the adoption of recent technologies including management innovation systems shows, the costs of systems declines and the technological sophistication of the workforce increases, opening such process innovations to smaller companies too.

2.5.3 Innovation issues in the Public and Police Sectors

The recent devolution of managerial (and particularly financial) decision making in the UK public sector as a whole encourages entrepreneurial activity. Research in the School sector (Boyett and Finlay 1993) has indicated that a change in this 'ownership' has acted as a catalyst for entrepreneurial action. It is interesting that, in the most recent paper on Police Reform (Home Office 2003), the Home Secretary suggests greater devolution (to Basic Command Unit aka Division level) with resource allocation directly to this point. There seems to be an increased understanding among Police managers that the service is likely to follow the 'trailblazing' parts of the public sector such as education and health in the sense of increases 'performance' resources, and therefore ultimately reward for innovation.

Borins (2001) has taken less extrapolated key prescriptions for making large public sector organisations more innovative, including support from senior managers, rewards and awards for innovation, resources for innovation, diversity and kaleidoscopic thinking, learning from outside, and the existence of a culture in which risk is encouraged and failure not punished. This study identified that traditionally innovations developed by public servants are typically government property, and there is little opportunity for personal reward. There is no access to venture capital to fund public management innovations. Bonuses tend to be non-existent to miniscule in comparison to the private sector. Also there are grave consequences of failure of innovations, from the media and the public at large. Stringent central controls put in place to minimise corruption also constrain the innovativeness of public sector staff. There are clear barriers to innovation from this empirical study.

Innovations dominate current thinking on current policing methods and processes. Recent works have explored the adoption of innovations. Zhao (1995) concludes that police innovations are adopted due to environmental factors. However, Mullen (1996) concludes that police innovations are adopted due to internal, departmental factors.

2.5.4 External and internal issues for Innovation

Borins (2001) found that although there is a traditional view that public sector innovations came from the top and are then just implemented by other staff; the empirical reality is that half of public sector innovations come from middle managers and frontline workers, with only 25% from senior managers. This study also identified the cultural conditions that led to the innovations:

- Internal problems
- Crises
- Political influence
- New Leadership

Borins (2002) identified key conditions for supporting innovation:

- Support from the top
- Rewards and pay for innovation
- Resources for innovation
- Diverse workgroups
- Learning from the outside
- Collective responsibility across the organisation
- A culture of experimentation, allowing failure

In terms of where innovations come from, Borins further stated that in the private sector, especially in the technical sector, many innovations emerge from the bottom up (Kanter, 1988, 2001). In contrast however conventional wisdom is that whatever innovation there is comes from the top down (Wilson, 1989). However Borins' research showed that most innovations are initiated by middle managers and front line staff. Despite this, substantial percentages of innovations are initiated by politicians

and agency heads, and because there are many fewer of these than middle managers, the propensity to innovate among senior managers was greater.

2.5.5 Bottom-up innovation

Borins suggests that bottom-up innovators will play a role in aspects of the innovation process such as advocacy or leading a pilot project. They are often creating an informal or alternative leadership structure. Awards are often the reward, with fast-track to promotion.

Senior managers may take a negative, neutral or supportive stance towards this. Hierarchical organisations may be more disposed to be negative, as the innovator threatens the hierarchy. A supportive stance requires senior managers to create a favourable climate for innovation, supporting awards and recognition for innovators. Another example quoted by Borins was William Bratton, New York City's Chief of Police in the mid 1990's. His philosophy goes to the heart of the issues to hand with this study:

"I know perfectly well that most police departments don't encourage or value innovation, cultivating instead conformity, complacency, and even timidity amongst police managers. But I have also met countless police officers and managers in my career who are bold, inventive, decisive and eager for the big challenges of restoring order and safety to urban communities. My job as a police executive was to bring these people to the fore and let them run....Every organisation has a core group of people with original ideas and untapped talents. Some are in leadership positions, some are not. A successful leader reaches deeply into the organisation to find these people.....To propel a large organisation forward, the leader has to enlist literally hundreds of co-leaders at every level.....When people show initiative, perseverance and competence in the field, reward them. I found my best managers in the middle and bottom of the vast managerial cadre at the NYPD. Their promotions sent a signal of opportunity to their fellow managers". (Bratton and Andrews, 2001).

2.6. Conclusions and Conceptual Model

The literature review has shown that there is a great deal of developing thought and research into intrapreneurship and innovation, inextricably linked for the purposes of this research study.

The construction of a Conceptual Model to examine for North Wales Police, and to inform the development of a research instrument to help answer the research question, starts with defining the scope of intrapreneurship ("what might intrapreneurship look like?"). This has been taken as the Antonic and Hisrich (2003) eight dimensions model (2.3.2), as it has been shown to have been built on the refinement of a set of developing academic models (Table 2).

Then, this informs the development of a model of defining factors in promoting or inhibiting a public sector intrapreneur. This is structured in three sections: -

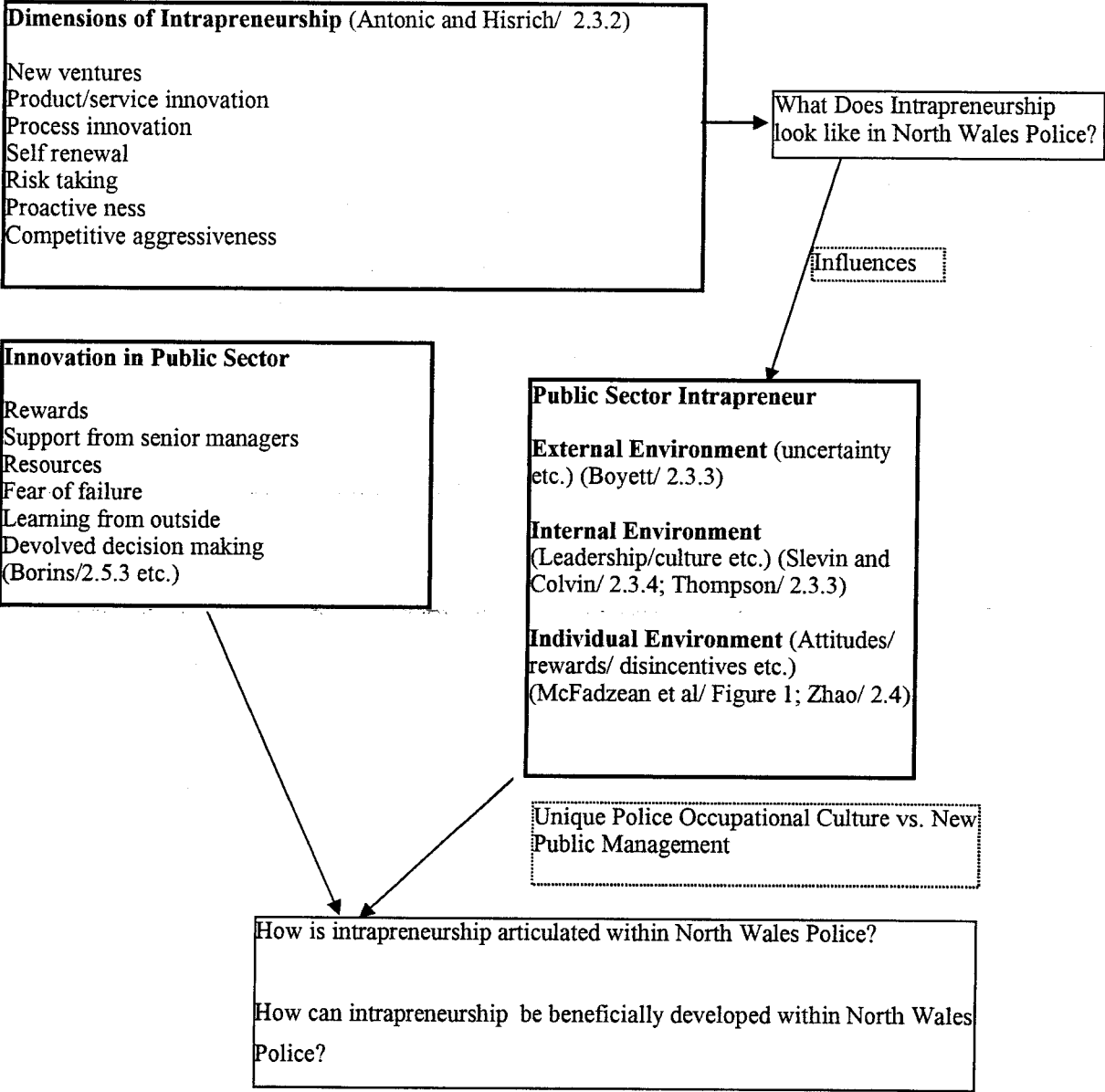
1. the work undertaken by Boyett in defining the public sector intrapreneur as a creature of uncertain external environment (2.3.3);
2. critical internal environmental factors i.e. culture and leadership (Slevin and Colvin, Thompson 2.3.4; 2.3.5.1), and devolved decision-making (Boyett 2.3.3); and
3. the internal, behavioural environment (2.3.5.2, importance of intrapreneurial attitudes, skills and knowledge)

These are filtered through the context of the specific Police organisational culture (2.3.4) and the broader context of New Public Management (2.5.1)

As a second strand, innovation is shown to be a complementary (2.4), and any examination of intrapreneurship needs to take account of a specific examination of the issues of innovation. This is in the psychological area of attitudes vision and action, and specifically, to the field of public sector innovation in the research undertaken by Zhao, and Borins (2.5.4) the key cultural aspects of innovation that impact on intrapreneurship.

The model, which will set the context for this study, is as follows in Figure 3:

Figure 3 – Conceptual Model



CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter will identify the following issues:

- Understanding of research philosophy and principles (general)
- Discuss what is available for this project – argument for why what has been chosen is appropriate/ rejected methods
- Construction of instrument – show where questions come from (literature through conceptual model)
- Research procedure (timescales, procedure)
- Validity (data), reliability of instrument, triangulation, ethics

This will provide a full explanation for the chosen research approach, and allow the research to be replicated, if needed.

3.2 Research philosophy and principles

The research process has been designed to identify the attitudes of key members of staff of North Wales Police to intrapreneurship and innovation, in the context of a full understanding of the current academic literature on this area, and a review of the external environment as it influences and impacts on this issue within North Wales Police. This is summarised in the conceptual model, as outlined in Chapter 2.

Referring to the conceptual model, the purpose of the primary research is to identify and explore attitudes to innovation and intrapreneurship within North Wales Police. This will contrast the identified research results in the internal context with the external context for the Police, UK Public Sector, and organisations in general, via the literature review.

The literature review has shown that the whole academic area of innovation and intrapreneurship, and the links between them, is one which is emerging and constantly developing. It is not subject to generally agreed laws, processes and systems. There is no specific research in the UK Police context, and therefore the over-riding research

philosophy is Interpretivism. As Remenyi *et al*, quoted in Saunders, Lewis and Thornhill (2003), suggest, this infers a need to discover “*the details of the situation to understand the reality or perhaps a reality working behind them*”. The philosophy behind the research is to explore the “*subjective meanings motivating people's actions in order to understand them*”.

In terms of an approach to the research, in this particular context, as there is not an attempt to scientifically test an agreed theory or hypothesis, there is more of an emphasis on an inductive approach building a theory to better understand the issues underpinning innovation and intrapreneurship within North Wales Police. Although a theory is being built about the specific attitudes to innovation and intrapreneurship in North Wales Police, it is within a context of an emergent theory as encapsulated in the conceptual model. Results will show whether general models as outlined apply within the specific circumstances of North Wales Police.

This approach suggests an initial research instrument which will gather and analyse qualitative data, be consistent with small sample sizes (as there is no need for strict statistical analysis), and then inform a further, second research instrument which will focus more closely on issues and investigate them in more detail with

3.3 Unit of Analysis and Sources of Data

The sources of data in this instance are employees of North Wales Police. However, in contrast to many organisations, there is a distinct separation between Police officers, and civilian Police Staff. In British law and similar legal systems, a Police Officer has the legal powers of arrest given to him or her directly by a sworn oath and warrant, rather than being delegated powers that he or she has simply because of employment as a police officer. Technically this means that each sworn constable is an independent legal official rather than simply an employee of the police.

Police staff have no such powers and are employed in support functions such as Finance, Human Resources, Information Technology and administration. There is a distinct cultural as well as functional difference between Police Officers and Police Staff (Leishman *et al* 1995) which makes it important to represent the views and attitudes of both distinct sections of the Police's employee base.

Another aspect to the research is the potential difference in viewpoints between senior managers and others as regards innovation and intrapreneurship. In designing the

research instruments it is important to represent the views of these different factions within the employee base as it will be of interest in answering the research question – particularly to see if there are significant attitudinal differences between senior managers and the rest of the employee base regarding the barriers to and drivers for innovation and intrapreneurship.

3.4 Construction of instrument

3.4.1 Semi-structured interviews

The research strategy, in response to the conceptual model and the research aims, favours an initial exploratory approach. This will investigate the broad scope of the research, identify key aspects that can be investigated further, explore attitudes to intrapreneurship. This requires an instrument that allows a rich investigation of the reasons behind attitudes, and would support a phenomenological approach, to better probe and understand meanings.

It was decided to hold a series of semi-structured interviews with selected key employees within North Wales Police. These would be face to face interviews, in order to encourage a full, frank and confidential response. The results from these interviews would then be used to inform the scope and design of a questionnaire to go out to a wider selection of employees, as a second stage.

At the initial stage, a semi-structured interview is the best way to obtain data, as the questions will be open-ended, complex, and will need to be varied in terms of order and logic (Easterby-Smith et al., 2002; Healy, 1991 cited in Saunders et al 2003).

These questions were identified with reference to the conceptual model, the conclusions of the literature review. A number of the questions were adapted from “The Business of Innovation” self-assessment toolkit (Prometheus Consulting 2002), which had been used in previous MBA research and found to be a useful tool, in providing open questions focused on the innovation – related aspects of intrapreneurship.

Specifically, these questions reflect:

<u>Questions 1 - 2</u>	The Dimensions of Intrapreneurship (2.3.2)
<u>Questions 3 – 9,</u> <u>14-20</u>	Internal environment as it affects Intrapreneurship (2.3.3, 2.3.4) and Innovation (2.5.3)
<u>Questions 10 – 11,</u> <u>13</u>	Individual environment (2.4) and Innovation (2.5.3)
<u>Question 12</u>	External environment (2.3.3)

They were formulated to draw out rounded, key opinions especially relating to the cultural Internal and Individual aspects of intrapreneurship. The subject area of questions relates directly to literature references.

3.4.2 Questionnaire

The second stage of the research is a survey questionnaire (Appendix 2) issued by email to a sample of employees across North Wales Police. This has been designed to allow the formation of more reliable conclusions about the research question, by synthesising the results of the interviews into a set of defined, largely closed and multiple-choice questions that can be circulated more widely and represent a wider set of views.

This instrument is not designed to meet the needs of reaching a probability/representative sample in order to scientifically generalise about the total population. Given the research strategy there is considered to be enough data with the interviews and the questionnaire backed with the literature review to practically infer generalities about North Wales Police without the complications of selecting a probability sample to accurately reflect the whole.

A purposive sampling strategy, in particular using a heterogeneous approach, has been selected as the most suitable to answer the research question. This has been defined as “(it)...enables you to use your judgement to select cases that will best enable you to answer your research question” (Saunders *et al* 2003). The strategy has therefore identified information-rich respondents across the main areas of North Wales Police in terms of Police Officer and Police Staff; Senior and Middle management as well as general rank and file. All are chosen as people who would, in the interviewer's

knowledge and experience, have at least a base line understanding of the concepts being discussed and an interest in taking part. A consideration was to get a high response rate.

Most of the questions on the survey questionnaire are to gather data on opinions rather than behaviour. Considerable care was taken to ensure that the way the questions were framed was not generally ambiguous, confusing or capable of misinterpretation, as a result of a piloting phase using colleagues in my own team. In general the closed-response nature of the questions was kept as simple as possible with category questions, and the length of the questionnaire was kept deliberately short in order to focus in on key issues and to aid completion and response.

The questions were designed with reference to the responses from the initial interview responses, to focus in on what appeared to be key aspects of interest. As 'intrapreneurship' is a technical term unlikely to be easily understood by many respondents, the terminology refers to 'innovation', 'new ways of doing your job' or specific identified areas of intrapreneurship such as 'new systems and processes' or 'new organisational structures'.

Question 3 *'Do you think NWP is an innovative organisation?*

Internal environment (2.3.3, 2.3.4)

Question 4 *'If you think NWP is innovative, why?'*

Importance of range of environmental factors (2.3.3, 2.3.4, 2.3.5.1)

Question 5 *'Does NWP allow you to decide your own work objectives and/or methods?'* and

Question 6 *'Are you able to develop and implement your own ideas for new ways of doing your job?'*

Importance of devolved decision making (2.5.3, 2.5.4, 2.5.5)

Question 7 *'How do you perceive North Wales Police compared to other forces?'*

Perceptions of relative performance, dimensions (2.3.2)

Question 8 *'How supportive are ACPO with new ideas and new ways of doing your job?'*

Internal environment – leadership/ culture (2.5.5)

Question 9 *'What stops you being innovative?'*

Barriers: Internal (2.3.4), individual (2.3.5.2; 2.5.4, 2.5.5)

3.5 Research procedure and administration

3.5.1 Interviews

The semi-structured interviews were designed to be as free from bias and as capable of being repeated as is possible, given the circumstances of the research. They refer to the key measures to overcome bias, as identified by Saunders et al (2003):

The interviewer (Tom Barham) has significant experience of the issues surrounding intrapreneurship from an income generation point of view, as well as having worked closely with major IT change programmes. The experience of undertaking previous MBA study and research within North Wales Police has also given the interviewer comprehensive generalist knowledge of the organisation and the topic.

All interviews were set up via a detailed email giving the detail of the subject area to be covered, as well as the support of senior managers (specifically the Director of Finance and Resources) for the research. The confidentiality of the responses was also referred to, as was the desire to set an appointment at a time and venue to suit the respondent. All interviews took place at the place of work of the interviewee.

Interviews were all undertaken in business dress, which would be the expected mode of dress for such an event for both police officers and police staff.

The interviews were a mixture of ones where the interviewer knew the interviewee, and a minority in which there had been no previous meeting. Therefore there was a brief and consistent introductory statement concerning the background and purpose to the research, and a reiteration of the confidentiality of the research.

The questions for the interview were tested beforehand with colleagues, refining out ambiguous or lengthy questions and academic or organisational jargon. An example is the word 'intrapreneur' which is not a generally understood term within North Wales Police. This was replaced with the more common 'entrepreneur' with the internal context explained.

Questions were framed to build up trust and confidence in the process at the beginning with more complex and sensitive questions towards the end.

The questioning technique tested understanding with the regular summarising of interviewees' explanations to ensure accuracy.

No recording equipment was used in the interviews. The responses were noted down directly onto laptop computer and then transcribed following the interview. Tape recording the interviews was considered but discounted as intrusive and inhibitive.

12 requests were made for interviews. These included senior police officers, senior police staff, general police officers and general police staff. Interviewees were selected for their exposure to intrapreneurship issues and their perspective on the issues from either being a driver of innovation and/or enterprise or involved in a process, product or service that might be identified as intrapreneurial.

All bar one of the planned interviews took place – one was cancelled and could not be rescheduled in due to work commitments. The 11 interviews were undertaken during April 2005.

3.5.2 Questionnaire and sampling strategy

The results of the interviews then illuminated the construction of the questionnaire. This was planned as a self-administered questionnaire delivered and returned electronically. This method was chosen as it is a relatively unbiased and easy to distribute to a wide selection of people. It also suits the relatively focused set of questions which could now be framed in a generally multiple – choice way, having now a better understanding of the context post – interviews.

A system used in North Wales Police for market research purposes, which allows a direct input, collection and analysis of data, was considered and rejected as being too

complex to administer. Finally a questionnaire document was designed using MS Word and attached to an email with a personal message explaining the context of the research and its importance to North Wales Police, as well as the confidential nature of the research.

Emailed questionnaires were sent to 75 members of staff.

3.6 Limitations of the Research

The first stage semi-structured interviews are mainly designed to inform the design of the second stage questionnaire. The results from the interviews, although discussed in the analysis, are not in themselves suitable for generalisations about the overall population. There are clear potential issues with interviewer and interviewee bias in terms of the potential impact of the personality of the interviewer and the interpretation of the responses, especially as the interviewer is himself an employee of North Wales Police and therefore has a potentially - sensitive position especially regarding contentious issues such as barriers to innovation. The results are still of interest nevertheless, given this caveat, and are wrapped into the analysis. Also, the conclusions to the analysis of the research have been related back to the (emergent) existing theory providing a triangulation.

Purposive, rather than statistically – significant probability sampling, has been chosen for ease of research given the timescales of the MBA Dissertation as well as being suitable for the subject area.

3.7 Use of computer programmes

SPSS has been used as a data analysis tool for the second stage questionnaires. As this is an inductive approach with a positivist approach to data collection, there has been no attempt to draw statistical inferences from the data analysis.

3.8 Ethics

A specific ethical stance has been taken in the design, data collection and analysis stages. This has taken into account the following issues, deriving from the context of both parts of the primary research being subjects internal to North Wales Police, and the sensitivity of the questioning undertaken. A meeting early in the design stage for this research with NWP's Data Protection Manager also informed the way data was collected and analysed, with specific advice for the use of email in the questionnaire delivery in the context of North Wales Police's Data Protection Policies and the Data Protection Act 1998.

3.8.1 Confidentiality/ anonymity

Issues surrounding the use of email to gather research data were considered at the design stage, and careful planning and management through all stages of the research project ensured the privacy of the data. All respondents were briefed at the start of the interview, and in the briefing note to the questionnaire, that their data would remain confidential and non-attributable, and that their participation would be anonymous. Care was taken with the way that data has been analysed and presented in this document to ensure that no specific comment is personally attributable and identifiable by potential audience, internal or external. All questionnaires, once analysed using SPSS, were shredded and emails deleted.

3.8.2 Access

It was decided that to use the support of the Director of Finance and Resources for this project would ensure that individuals took part in interviews and that there would in particular be a significant response to the questionnaire. However the design of the written requests for both was carefully worded to not put undue pressure on respondents to take part in the research if they would have preferred not to. All participants were made aware that their participation and views would be used in the production of an MBA dissertation and an internal report (an edited version of results and recommendations) for ACPO, and therefore gave their informed consent. This was undertaken by a verbal briefing before the interview, and in the case of email questionnaire, a written briefing as a part of the initial email request. All interviews took place at times and places suggested by the respondent.

3.8.3 Objectivity

During the collection of data, especially in taking notes from the interviews, the interviewer took an objective stance and, especially where comments were agreed as critical or controversial, the interviewer confirmed with the respondent the wording for the notes taken.

CHAPTER 4

ANALYSIS OF THE DATA

4.1 Introduction

This chapter offers a presentation of the results of the interviews and questionnaire. It will show how the data is relevant to the research question, and identify general trends and results. Chapter 5 will offer a full contextual analysis of the results as they reflect on the literature on intrapreneurship.

This analysis focuses on the six most critical summary headings of findings to the research question; and specifically those where the data expressed showed areas that were additional to or incongruent with the existing literature and conceptual model.

4.2 Application of methodology

The research methodology has been applied as described in Chapter 3. The results are extrapolated from both stages of the research, the interviews and the internet questionnaire. As has been stated, the results should be interpreted in the light of the chosen heterogeneous purposive sampling strategy for both stages of the research. They cannot be taken to be statistically – representative, but as they are representative of the critical diverse characteristics of the population (see 4.3) they can be interpreted as indicative of trends, views and opinions.

Where statements are quoted they are as transcribed in the interviews or as written down by the respondent to the email questionnaire.

4.3 Findings

These are summarised in section 4.4 below. Note that the data for the Internet Questionnaire is crosstabulated where necessary against i) whether respondents are Police Officers and Police Staff, and ii) the numbers of staff that the respondent manages. Of respondents, 45.6% were Police Officers and 54.4% Police Staff (Table 5). 42% of respondents did not have staff management responsibilities, with 23% managing small teams of up to 5 people (Table 6).

4.4 Research Objective - Investigate how intrapreneurship is articulated within North Wales Police

4.4.1 What is Intrapreneurship in a Police Context?

Note – the term “Intrapreneurship” was articulated in the construction of the interviews and questionnaire as the term “Entrepreneurship”, as it was decided that this would be more generally understood by respondents. It was decided that this would not confuse the issue, as, in interviews and questionnaires, the term was put in the explicit, specific context of the Police, not in the general sense of the word, where a potential confusion might have arisen with ‘small firm’ entrepreneurs.

A diverse range of views were identified to the area of how respondents articulate the range of Intrapreneurship within a police context.

Some saw intrapreneurship in terms of outputs i.e. what it might look like: *“New processes – IT, HR, Payroll, Activity-Based Costing”, “Business ventures”, “Branding and corporate identity for departments”, ...our general strategy to outsource”*

Others saw it in terms of the broader philosophical or cultural picture: *“I see the Police as social entrepreneurs, finding new ways to make communities better”, or “Entrepreneurship is the gap in the Policing Plan and Strategic Plan in which NWP can do it it's own way”*. Another comment identified the *“move from traditional policing into a much wider scope – regeneration, partnership, community policing”*. Others saw it as *“integrating business skill into how we operate; problem solving, thinking outside the box”*

Frequent responses to this question identified the importance of leadership and management, and defined entrepreneurship as the *“Chief Constable’s vision”, “ACPO’s initiatives including reducing road deaths, burglary, Dyna Ddigon”,* and the *“Director of Finance and Resources’s ability to generate internal investment capital”*. Other comments here included: *“Good examples are driven from senior managers (‘Aquarius’, restructuring) – but are not seen further down the hierarchy”* suggesting that Intrapreneurship is top-down, but not bottom up.

The Chief Constable's view was that *"Police culture in general is a stable culture for a stable world. We like doing what we did yesterday. Police Regulations attract conservative, reactionary responses. However, innovate or die is as relevant here as in business."*

In terms of email questionnaire respondee views of relative performance (Table 13), most respondees thought NWP better or much better than other Police forces in Technology (93%) and the linked area of developing new systems and processes (82%). The least favoured areas were new organisational structures (33%) and new strategies (40%) suggesting that the intransigent police culture may still be hard to change. Interestingly, the crosstabulation in Table 22 shows that 46.2% of Police Officers thought NWP relatively better or much better than other forces at creating new organisational structures, compared to only 22.6% of Police staff.

Summary – it is clear that there is a very diverse perception of intrapreneurship and what it means to North Wales Police. Within this there is a strong association of intrapreneurship and innovation with the leadership of NWP. The areas in which NWP is seen to innovate most are in technology, new systems and processes.

4.4.2 External Environment - is NWP reactive or proactive in anticipating change?

There was a wide variety of responses to this question, from the interviews. Many respondents thought that NWP was both reactive and proactive, depending on the part of the organisation in question. In general, there was agreement that North Wales Police is proactive in anticipating change in the 'back office' areas of technology and finance: *"Technology, ANPR (automated number-plate recognition) etc. are innovative"*, *"Information Management Group is proactive – especially Aquarius (a major technology change programme)"*, *"Reactive apart from Finance and Information Management Group"*. It was commented that this might be because of distance and size: *"We are a long way from the Home Office and can perhaps get away with things that others can't."* Another comment, reflecting on the culture set by ACPO leadership, was that in general: *"We are proactive now, after 5 years of stagnation under previous regime"*.

However many commented that North Wales Police is largely reactive when it comes to police operations: *"Operations are not responsive. In middle management some are prepared to meet the opportunity of different ways of working i.e. being involved with leading the Local Authority on planning issues, but it is the exception, not the rule"*. Human resources issues were also identified: *"How we are introducing Police Community Support Officers is an example of us being reactive, also the way we operate workforce planning issues"*

Some thought there was no harm in this in the general context of Police culture rather than North Wales Police specifically: *"The Police are reactive by nature – but the key issue is, is it strategic or knee-jerk?"*

Summary – again an affirmation of the technology and related areas in which NWP are seen to best innovate, and the cultural divide between Police officers (operational, reactive) and more generic areas supported by Police staff.

4.4.3 External drivers of and barriers to innovation in NWP?

The main drivers of innovation articulated here are the main drivers of performance. The demands of ACPO, mentioned by 56.1% (Table 12) is mentioned in the questionnaire much more than the Home Office (21%). However in the interviews, quotes from senior managers universally mentioned the importance of the various ways in which Police Forces are managed, assessed and measured were all mentioned: *"Performance and the Home Office", "It is all about performance. With modern management information you can see the results of actions"*. Some also mentioned the expectations of management closer to home: *"Drivers include the need to get most from our money, organisational pride, and the support of the Police Authority and Chairman"*.

Interestingly, the same drivers were also mentioned as barriers, in that although they challenge the performance of the organisation, they don't allow the space or time to act entrepreneurially: *"There is too much focus on how we do the business from Her Majesty's Inspector of Constabulary (HMIC)."* *"The HMIC baseline assessment leads to a coercion about how things will be done"*. Other regulatory and related barriers mentioned included *"Police Regulations, Unison (The Trade Union for the majority of Police Staff), Police Federation (the 'Trade Union' for the Police Officers up to Chief Inspector rank), Procurement"*.

Others mentioned the importance that public confidence and perception have in shaping the propensity to act entrepreneurially and innovate: *"Unforgiving climate", "Risks in terms of public perception", "Conservative culture of North Wales and resultant public caution"*.

It was also identified that one of the drivers of intrapreneurship and innovation in the past, might in the future be a barrier: *"lack of Home Office funding in the future"*.

The majority view, 70%, amongst those who responded to the email questionnaire is that North Wales Police is more innovative than other police forces (Table 11). However, as a respondee to an interview stated: "Its not that we are good, rather that other Police Forces are poor."

Summary – the importance of the performance culture currently surrounding the Police comes out here, and in particular how NWP senior managers are responding to that. Clearly too police regulations are a major barrier to innovation, and perhaps one that cannot be changed too much for reasons of public confidence.

4.4.4 Internal Environment - Drivers for Intrapreneurship and innovation

The vast majority of respondees to the email questionnaire (73.7%) thought that ACPO, the senior management team for North Wales Police, offered either a great deal of support or support in principle to Intrapreneurship (Table 7).

Of the reasons why North Wales Police is innovative (Table 12) from the email questionnaire, the enablers (support of senior managers, financial freedom) supported the key driver (demands of ACPO). This was backed by the views expressed in the interviews: *"The main reason is the financial backing, also the presence of key individuals including Director of Finance and Resources, Head of Information Management Group)", "Financial backing and amenable ACPO culture", "Leadership and bloody-mindedness"*. The personal importance of individuals was also mentioned: *"Reasons include the positive outlook and desire to make things better, which stems directly from Director of Finance and Resources"*.

When it comes to the support of senior managers in promoting innovation, there is a clear difference in the views of middle managers with 6-20 staff, of whom only 20% felt that it was a factor, whilst 54% of those with smaller teams of 1-5 staff felt it was (Table 20). Perhaps the reality of the support of senior managers, which those further up the chain of command might be in more day-to-day exposure, differs from the perception.

100% of middle managers, with 1-5 staff, felt that the demands of ACPO were a driver of innovation, whereas only 25% of those with no staff management responsibilities felt that way. Perhaps the desire of ACPO to foster innovation and promote entrepreneurship does not permeated down the full organisation (Table 18).

This support may be more passive than active: *"ACPO doesn't discourage it but the performance culture gets in the way by destroying thinking time. We will then perform badly in areas not measured. ACPO are openly encouraging, quietly discouraging"*.

Also, this support may meet some immediate barriers: *"There is ACPO support but not from command team (Divisional Commanders) – we have had to make change happen behind their back", "ACPO are very supportive, but not down the line, however better than it was."*

Another comment from the interviews suggests there is a price for support: *"Yes – but expectations are high"*.

One of the key enablers of intrapreneurship was identified in the literature as the ability to make resource decisions (articulated here as ability to decide own work objectives, or develop and implement own ideas for doing job) without permission from further up the command chain. Over 80% of respondees stated that they can decide work objectives occasionally or all the time (Table 8) and 77% are given the freedom to develop ideas with the minimum of checks (Table 9) suggesting a high level of perceived delegation of responsibility. Typical comments in the interviews were: *"We have far more freedom than other forces, budgets are devolved to the lowest possible level i.e. Inspectors have budgets."* *"We are way ahead in devolution but it is harder now to make efficiency savings"*.

Just because there is delegation of responsibility, doesn't necessarily mean that people have the desire or ability to respond to this: *"There is lots of downward innovation – we are not so good at innovating from the bottom up"*, *"We need middle managers to be leaders not managers"*.

It was commonly mentioned that innovations don't come from lower levels of management: *"Not at lower levels"*, *"...drag at Superintendent level"*, *"Not at lower levels – example of failed Force Suggestion Scheme"*. The importance of the hierarchical culture of Police Officers was referenced: *"Current Police culture is driven by response and rank, not serving an innovation culture. Ideas are not captured in a structured manner, good practice is rarely proliferated, lessons aren't learned and there is no recognition of knowledge as a resource that has to be managed"*.

Financial freedom was also mentioned far more by senior managers as a factor in NWP being innovative, with 70% of those managing 6-20 staff agreeing that this is a factor, but only 31% of those managing 1-5 staff and 25% of those with no staff management responsibilities. (Table 19). Again this suggests that the empowered culture within NWP may only go so far.

Summary – clearly financial freedom and devolvment of responsibility has created a culture in which intrapreneurship can thrive, especially with those higher up in the hierarchy, and those on the Police staff side. Innovation from the bottom up, and from the Police Officer operational side, seems a less certain internal environment.

4.4.5 What are the internal barriers to innovation in NWP?

The significant barriers to innovation within NWP found from the email questionnaire were 'Not enough time' (63.2% thought this was a factor), the very similar 'Too busy' (43.9%), and lack of rewards (17.5%) (Table 10), *"Lack of acknowledgement is a problem."* *"There is also a lack of recognition for success."* None of the other reasons (Table 10 - specifically, that they were cynical about innovation, didn't have any ideas, not their role to be innovative, that innovation comes from their line manager only, police regulations, unsupportive line manager, fear of consequences of failure) gets more than minimal, passing responses. Quotes mentioned in the questionnaire and the interviews included: *"Not enough time to think and plan";* *"Time needs to be freed up in order to allow time for innovation. There are still too much non-value added processes/ procedures taking up time which could be spent more productively."*

Similarly the following comments suggested that formal structures might need to be introduced to overcome this barrier: *"Too many competing demands on time as a District Inspector. However ACPO seasonal thematic seminars are an opportunity to identify and develop good practice/ successful tactics from elsewhere. It would need to be a 'safe environment'."*

Another view was: *"There is not always a great deal of consolidation of innovation – too much starting a new vision before the previous one is finished. Reflection is not always given sufficient consideration."*

One specific opportunity mentioned a number of times was: *"There is a need for a dedicated research and development department that does not get caught up with routine time consuming issues."* *"There is an opportunity for a dedicated divisional post to research and develop ideas – lack of time otherwise".*

Another issue is that of blocking in the hierarchy: *"Some middle managers are resistant to change and see challenges to the status quo as insubordinate. This has not helped empowerment."*

An important perspective mentioned in the interviews was that: *“Although we are now in possession of all the 'toys and gizmos' there is now constant flux and therefore running faster just to keep up. Not enough time to fine tune before next change. Stability needed.”*

Summary – the lack of time and fast pace of change are clearly holding back the ability of staff to be intrapreneurial.

4.4.6 Individual Environment – Risk and Reward

Responses suggest that there might be a difference in culture between the uniformed and non-uniformed parts of NWP: *“Yes, NWP encourages risk-taking in business side, but not in operational side”, “The ‘sir’ culture in uniformed ranks inhibits staff from taking risks”*. A common view was that NWP may encourage innovation and intrapreneurial activity but is still risk-averse: *“We are risk averse because of the media”*. A counter view was that: *“Empowerment culture has encouraged people to take more risks”*.

The interview respondees suggested that although the general NWP culture values innovation: *“Culture has changed to accept change more now”, “Yes – desire to have the best of everything. Many forces still contract Local Authorities to run their finance systems”, “No restrictions as in other forces – progress moves along fast”*; there is still a problem with a lack of a consistent formal or informal reward structure: *“No rewards or incentives”, “Either no rewards or sickly overkill”*.

On one side: *“There is a clear message from ACPO that there is support for innovation and acceptance of failure.”* on the other: *“There is still a blame culture within North Wales Police and failure is not accepted.”*; *“The focus still can be on not getting it wrong, rather than getting it right.”*

An important cultural issue in the uniformed side was: *“Promotion culture among Police Officers gets in the way of taking risks for fear of failure and the consequences.”*

Summary – despite a perception that NWP is better than other Police forces in promoting intrapreneurship and innovation, there is an inconsistent perception of the ability to take risks, and to fail, especially among the operational side.

There is still a significant fear of the consequences of failure, in terms of potential reputational consequences.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

5.1 Introduction

This chapter brings together the research findings outlined in Chapter 4 into the context of the existing literature on intrapreneurship and innovation as shown in Chapter 2. This will allow a review of the methodology in the context of a reflection on the appropriateness of the methodology from Chapter 3, and a review of the validity of the initial research question, from Chapter 1.

5.2 Critical Evaluation of the Adopted Methodology

In summary, the chosen methodology was an interpretivistic philosophy, inductive approach, from the point of view that although there is a great deal of theory around intrapreneurship and innovation, little of it is specific to the Police culture. In retrospect, this seems a fair approach. The results seem to concur with the conceptual model's viewpoint that there are differing dimensions to intrapreneurship (mainly fitting the Antonic and Hisirich categories), that there are 3 main aspects to the public sector intrapreneur (external, internal and individual) and that there are key elements to support innovation (Borins, plus the issue of lack of time/ competing work pressures), but all refracted through the unique Police occupational culture which seems to be a critical finding – i.e. that the Police Officer culture is still different to and less open to intrapreneurship than the civilian side.

However, the most valuable and insightful aspects of this research were the initial in-depth interviews, which gave a range and richness of feedback about this complex, contextual and personal area of work. The articulation of concepts of intrapreneurship and innovation into the subsequent questionnaire in a way that all respondents could understand and relate to their roles, may have ended up providing too much of a bland context and therefore a lack of depth to the responses. The fact that a positivist sample (and a non-scientific, deductive use of a survey) was taken also means that the results cannot be extrapolated into conclusions about the population as a whole, but the responses to the questionnaire, perhaps due to the framing of the questions as

much as the structural choice to undertake a wider questionnaire, did not fully justify the choice of methodology.

An alternative research strategy to this was considered at the initial design stages of this dissertation. This was to follow the semi-structured interviews with a case study, rather than a series of interviews. In retrospect, a case study, with its detailed look at a specific example of intrapreneurship, may have been a more insightful and robust means to answer the research question. At the time, a specific project was coming to an end; a major business process re-engineering and IT project called 'Aquarius', which has reduced/ integrated 22 processes down to 3, and provided mobile and 'just in time' data on crime and all aspects of work to the point of action i.e. a police officer on duty. In the context of the results here, this might have proven particularly valuable, in that it fits all the research findings in Chapter 4: it is a project initiated and supported by senior management, only possible because of the aspects of financial freedom, focusing on IT and new processes, and involving a mix of Police staff and police officers. It has involves considerable risk and the consequences of failure have been catastrophic, from the potential impact on operational work to the reputational impact locally and with the performance paymasters the Home Office.

5.3 Conclusions about the Research Objectives

To revisit, the research objective is to investigate how Intrapreneurship can be beneficially developed within North Wales Police.

5.3.1 What is Intrapreneurship in a Police Context?

In summary, this was found in section 4.4.1 to include a widely diverse range of responses; with answers generally reflecting the literature's diverse views on the nature of Intrapreneurship (Table 2)

There are those who saw Intrapreneurship in terms of outputs: i.e. new processes, ventures, focus (i.e. neighbourhood policing) and services, generally supporting the views of Antonic and Hisirich (2003) in their eight-dimension model.

Many others proposed the definition that supports Boyett (1993)'s definition, focusing as it does on devolution of management decision-making, and the existence of change and turbulence. Also frequent responses to this question identified the importance of leadership and management, supporting Thompson (2004).

Perhaps most interesting, however, was the idea of the definition of intrapreneurship within the Police force as being agents of change within society, a fairly major redefinition of the purpose of policing.

5.3.2 External Environment - is NWP reactive or proactive in anticipating change?

Findings (4.4.2) were that NWP is proactive in anticipating change in the 'back office' areas of technology and finance, but less so in operational and human resource areas. This shows a correlation with the literature suggesting the innate conservative and traditional occupational culture of operational policing (Barton 2003) (2.3.4), and perhaps the observation that operational policing is more of a 'depth culture' (2.3.5.1) issue than the more generic areas of finance and technology. The more proactive areas of finance and technology are those more exposed to external influence within and beyond the public sector, where the "competitive aggressiveness" dimension identified by Antonic and Hisrich (2.3.2) might be more closely identified, and the more obvious environmental changes in terms of new public sector management and the rapid rise in Information technology.

This also accords with the models of innovation discussed in 2.5.2, in particular that process innovation seems to be favoured by big bureaucratic organisations operating in mature markets with high levels of organisational slack (Porter, 1980; Cooper, 1998).

What this might also refer to is the impact of an individual "intrapreneur" whose direct management responsibilities cover the two areas most commonly mentioned as being proactively developed – finance and technology. This suggests the critical influence of the individual intrapreneur, as identified by Shaver and Scott (1991) (2.3.5.2). The fact that this particular senior manager has direct control over the areas most identified as intrapreneurial, whilst less control over areas that have been identified as intransigent, is telling.

5.3.3 What are external drivers of and barriers to innovation in NWP?

In 4.4.3, drivers of innovation were primarily recorded as the external performance measurements and 'paymasters' of the Police Service; the Home Office, Her Majesties Inspector of Constabulary and the Police Authority. The leadership of the current ACPO team, including the Chief Constable and Director of Finance and Resources, is also identified as very important.

Barriers included the high levels of regulation from the HMIC, Home Office and other issues such as unions, the importance of public confidence (especially in a conservative area such as North Wales) and the media.

Again this accords with the specifically Police-related innovation research undertaken by Borins (2001). This found the importance of both new leadership and political influence in setting the cultural conditions favourable for innovation (2.5.4)

5.3.4 Internal Environment - Drivers for Intrapreneurship and innovation

In summary, in section 4.4.4, the vast majority of respondents thought that ACPO, the senior management team for North Wales Police, offered either a great deal of support or support in principle for intrapreneurship. Police staff were more likely to think that the demands of ACPO were a reason for NWP being innovative than Police officers. All middle managers thought that the demands of ACPO were a driver, but only a quarter of those interviewed with no staff management responsibilities agreed.

This support may be more passive than active, and may not be consistent into middle managers or in terms of 'bottom up' innovation (the identified output of intrapreneurial activity) especially in the more traditionally hierarchical are of operational policing.

One of the key enablers of intrapreneurship was identified in the literature as the ability to make resource decisions without permission from further up the command chain. Responses suggested a high level of perceived delegation of responsibility.

The devolution of power as a key factor is mentioned in Boyett's (1993) definition of a public sector intrapreneur. These responses are also consistent with Thompson (2004)'s recognition of the importance of an intrapreneurial strategic leader (2.3.3). They also support the views expressed by Borins (2001) referring to key conditions for innovation including support from the top, and new leadership (2.5.4). Perhaps the delegation of responsibility within NWP is consistent with the development of a depth culture or intrapreneurship within NWP, as shown by Kotter and Heskett (1992) (2.3.5.2).

Leadership does overall seem to have been a more important issue in the study than has been mentioned in the literature. What NWP's leaders seem to have done is impacted upon the depth culture of at least parts of the organisation, creating the ideal conditions for intrapreneurship as identified and most clearly and relevantly synthesised by Boyett: high levels of social 'self-satisfaction', the ability to spot opportunities and act on them. The extent of this depth culture change is important, and whether it is consistent across both Police Officers and Police Staff.

The finding that financial freedom was much more of a factor for senior managers than those with smaller staff management responsibilities, suggesting that the empowered culture within NWP may only go so far, hints that if there is a desire to see innovation from the bottom up, as suggested by Borins, 2001 (2.5.4), then it may need to identify sources of financial support for managers and front line staff.

5.3.5 What are the internal barriers to innovation in NWP?

From section 4.4.5 the significant barriers to innovation within NWP found from the research were chiefly lack of time, lack of formal and informal rewards, and to a lesser extent resistance to change in the organisational hierarchy.

Rewards are identified as a key motivator in the literature examining the psychological aspects of intrapreneurship (2.3.5.2). There is less of a scope within NWP for financial rewards (although the force does operate a very narrow performance related pay scheme), but the lack of even status and recognition factors are important when seen in the context of their relevance (McClelland, 2002), (Burns and Kippenberger, 1998), Maddock (2002). The importance of joined – up incentives, and the failure of NWP to successfully implement them, is key.

Probably the most commonly mentioned barrier from both parts of the research was the issue of lack of time. This suggests that, despite there being greater ownership of resources by individuals, and greater ‘permission’ to try new ways of working and solutions, the impact on genuine outcomes will be limited without a recognition of the need for development time, and recognition of the importance of this, for individuals. The relatively extensive literature on the ‘psychological’ aspects of intrapreneurship (2.3.5.2) makes much of the importance of the right type of individual (Boyett, 1997; Thompson, 2004; Stewart et al, 2003 etc.) and of joined-up incentives (Maddock, 2002) but nothing specific about the pressures of time and available resources.

The issue of resistance to change in the hierarchy is in accordance with the limited literature on enterprise issues within the Police service. Barton’s 2003 study (2.3.4) suggests that the unique Police occupational culture (Police Officers in particular) is a major barrier to developing intrapreneurship activities. However, it would be a major surprise if this factor was not mentioned at all, and the fact that it was mentioned much less than the other two major issues above (and often contradicted in interview, or specifically the view made that the culture is changing for the better) must be seen as a positive.

5.3.6 Individual Environment – Risk

In section 4.4.6, it was found that the culture might be saying one thing but being interpreted as another about risk: *“There is a clear message from ACPO that there is support for innovation and acceptance of failure”* on the other: *“There is still a blame culture within North Wales Police and failure is not accepted.”*;

Borins (2001) and Jansen et al (1994) have suggested the critical importance of the area of risk and fear of failure (2.5.3) as a part of the innovation process in the Police sector. This, which also is consistent with the literature in the context of the lack of financial and status (Burns and Kippenberger, 1988; Maddock, 2002) rewards, suggests that there may again be a dichotomy between the “superficial” culture and “depth” culture as evidenced by Kotter and Heskett (1992). There may be more of a fear of failure related to intrapreneurial activity at the core of the culture, especially with Police Officers, than many managers are either aware of or believe to be the case. The “superficial” organisation may have changed, but real change may be more sporadic, and as Beer et al (1992) suggests, may be in those areas where real, concrete situations such as developments in IT and the direct impact of leadership have made the difference.

5.4 Conclusions about the Research Question

The research question is an open and all – encompassing one, necessary for the lack of knowledge about intrapreneurship in the existing literature as it specifically applies to the Police sector in the UK. It is also a relevant question to the management of NWP, who have an interest in a real picture of where intrapreneurship is within NWP, what is inhibiting it and what is encouraging it.

At this stage of exploration, such an open question helps to inform further research areas. For example, the case study suggested in 5.2 might allow more detailed illumination of the issues to hand. A more specific research question about the culture of the Police Officer and the specific aspects of this that inhibit intrapreneurship might, for example, be a next step.

5.5 Limitations

Clearly, the research strategy has been to form theory specific to the Police sector around the basis of a conceptual model assembled from various different sources and dimensions of intrapreneurship and innovation. The results show some mainly consistent findings but a purposive survey sample and semi-structured interview sample mean that the findings are not provably typical of NWP as a whole, and therefore wider inferences cannot be made at this time.

CHAPTER 6

RECOMMENDATIONS

6.1 Implementation Plan

6.1.1 Clarification from senior managers about their interpretation of 'intrapreneurship' and 'innovation' and their support for the development of these as a part of all staff roles (4.4.1) with specific clarification and support on the Police Officer side of the organisation (4.4.2)

6.1.2 Linkage to performance culture (4.4.3) by encouraging and developing a clear reward structure (Force Reward Scheme) for intrapreneurship and innovation (4.4.6) and the clear affirmation from senior managers of the 'right to fail'.

6.1.3 Identifying key intrapreneurs in specific areas of the organisation up and down the hierarchy (4.4.5) and giving them more development time, resources and support to come up with ideas and implement them.

6.1.4 Providing clear sources of risk capital internally to NWP with simple business-case processes to access for intrapreneurs with viable ideas (4.4.4)

6.1.5 Wrapping the whole intrapreneurship 'project' into a formal structure with involvement from Operational Divisional Heads to ensure that there is a smooth path to initiative development (4.4.4) (4.4.5)

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APPENDIX 1 – INTERVIEW QUESTIONNAIRE

QUESTIONNAIRE

ENTREPRENEURSHIP IN NORTH WALES POLICE

Code.....

Name:.....

Position:.....

Number of staff:.....

Police/ Police Staff:.....

Date.....

1. Do you understand what 'entrepreneurship' can mean, in a Police context??
- 2..How do you perceive entrepreneurship manifests itself in NWP? *New ventures (ie income generation/ driving school), innovation (New services, Technology/ processes, Policing Methods, Organisation (ie civilianisation), New/ radical organisational structures), Corporate renewal (empowered teams/ individuals risk-taking, creative thinking, seeing and capturing opportunities, risk awareness, persistence, vision) (Thornberry 2002)*
3. How much support does senior management offer for entrepreneurial behaviour in NWP?
4. On a scale relative to other Police forces, how innovative is NWP?
- Not very 1 2 3 4 5 6 7 8 9 10 Very

5. Why? What are the key attitudes and behaviours displayed by NWP?
Motivation, Ownership, independence, open-ness, tolerance of uncertainty

6. Is there a formal process of change management within NWP?

7. Are organisational structures in place that support devolved decision making?

8. How much does NWP value innovation as a part of its culture?

Low 1 2 3 4 5 6 7 8 9 10 High

9. Is support for innovation articulated consistently across senior, middle and junior managers, and in both uniformed and Police staff cultures?

10. Do you personally know who are the most innovative people in NWP?

11. Are they deployed in work that fully utilises their special talents?

12. Is NWP reactive or proactive in the way it anticipates external change and opportunities?

13. Do NWP staff have the skills and training to innovate be entrepreneurial?

14. Does NWP encourage an element of risk-taking by staff without punishing minor misjudgements?

15. Does NWP's organisational culture tolerate mavericks who challenge convention?

16. Do you allow innovative people to spend some of their time on projects of their own choosing?

17. Does NWP's performance management system address innovation at individual and team level?

18. Does NWP's hierarchy and protocol allow the rapid escalation and consideration of ideas?

19. What are the drivers of innovation within NWP? Direct experience/ observations

20. What are the barriers to innovation within NWP? Direct experience/ observations.

21. How informed do you feel about changes taking place in the way organisations are led and managed in the wider world?

APPENDIX 2 – EMAIL QUESTIONNAIRE

From: Barham, Thomas
Sent: 03 June 2005 13:12
Subject: Innovation Questionnaire

With the support of Tom O'Donnell, I am researching the subject of innovation within NWP. Responses will be analysed into a management report to help inform the way we support and encourage innovation as a part of our organisational culture, which I'm sure you will agree is a critical area for our future performance and excellence.

You have been selected as a part of this small sample of NWP staff for the interesting perspective you can provide. Would you be kind enough to complete the short questionnaire below, and return to me by 10th June? All responses will be fully confidential. As an extra incentive, I will be offering a bottle of champagne for one lucky respondent, chosen at random!!

1. How many staff do you manage?

0	1 to 5	6 to 10	21

2. Are you?

Police Officer	Police Staff

3. Do you think NWP is an innovative organisation?

Not enough	
More than other police forces	
Too much	
Don't know	

4. If you think NWP is innovative, why is this?

Financial freedom/ability to get ideas funded	Demands of the job	Overall demands of Home Office and Government	Demands of ACPO	Support of senior managers	Other

5. Does NWP allow you to decide your own work objectives and/or methods?

Not at all	Not enough	Occasionally	All the time	Other

6. Are you able to develop and implement your own ideas for new ways of doing your job?

Not at all	Only by formally asking permission from manager	I am given the freedom to do this with the minimum of checks	Not relevant to my job	Other comments

7. How do you perceive North Wales Police compared to other forces :

	New approaches to doing the job	New systems and processes	Income generation	New technology	New organisational structures	New strategies
Much better						
Better						
Same						
Worse						
Much worse						

8. How supportive are ACPO with new ideas and new ways of doing your job?

There is a great deal of support, I feel able to develop them without fear of failure	
There is support in principle but failure is not always tolerated	
There is little support for new ideas and the personal risk is too high	
Other comments	

9. What stops you from being innovative? (more than one response if you want)

Unsupportive line manager	
New ideas only come from senior managers	
Not enough time	
Not my role to be innovative	
Too busy doing my job	
Cynical about change	
Lack of ideas	
Will be punished for failure	
No rewards	
Police regulations	
Other	

10. Any other comments on innovation and/or entrepreneurship within NWP?

APPENDIX 3 – TABLES OF ANALYSIS

Table 5 – Cultural background to Questionnaire respondents

	Respondee - Police Officer or Police Staff	
	Count	%
Police Officer	26	45.6%
Police Staff	31	54.4%

Source – Email Questionnaire

Table 6 – Management background to Questionnaire respondents

	How Many Staff Do You Manage?	
	Count	%
0	24	42.1%
1-5	13	22.8%
6 - 20	10	17.5%
21 +	10	17.5%

Source – Email Questionnaire

Table 7: How supportive are ACPO

	Frequency	Percent
Great deal	18	31.6
Support in principle	24	42.1
Little support	4	7.0
Other	11	19.3
Total	57	100

Source – Email Questionnaire

Table 8 – Does North Wales Police allow you to decide your own work objectives?

	Does NWP allow you to decide work objectives?	
	Count	%
Not at all	1	1.8%
Not enough	8	14.0%
Occasionally	26	45.6%
All the time	21	36.8%
Other	1	1.8%

Source – Email Questionnaire

Table 9 – Can you develop and implement your own ideas for new ways to do your job?

	Can you develop and implement your own ideas for new ways to do your job?	
	Count	%
Only by asking permission	12	21.1%
Given freedom with minimum checks	44	77.2%
Other	1	1.8%

Source – Email Questionnaire

Table 10 – The Internal Barriers to Innovation in NWP

	Too Busy		Cynical about change		Lack of ideas		New ideas only come from Mgr		No rewards	
	Count	%	Count	%	Count	%	Count	%	Count	%
Yes	25	43.9%	3	5.3%			2	3.5%	10	17.5%
No	32	56.1%	54	94.7%	57	100%	55	96.5%	47	82.5%

Not my role to be innovative			Not enough time		Police Regulations		Unsupportive line manager		Will be punished for failure	
Count	%		Count	%	Count	%	Count	%	Count	%
Yes	2	3.5%	36	63.2%	5	8.9%	5	8.8%	2	3.5%
No	55	96.5%	21	36.8%	51	91.1%	52	91.2%	55	96.5%

Source – Email Questionnaire

Table 11 – Is North Wales Police Innovative?

	Is NWP Innovative?	
	Count	%
Not enough	7	12.3%
Same as others	6	10.5%
More than other police	40	70.2%
Don't know	4	7.0%

Source – Email Questionnaire

Table 12 – Why is North Wales Police innovative?

	Financial freedom		Demands of job		Demands of ACPO		Support of senior managers		Demands of Home Office	
	Count	%	Count	%	Count	%	Count	%	Count	%
Yes	22	38.6%	11	19.3%	32	56.1%	24	42.1%	12	21.1%
No	35	61.4%	46	80.7%	25	43.9%	33	57.9%	45	78.9%

Source – Email Questionnaire

Table 13 – Perceptions of relative performance

Developing new approaches to doing job

	Frequency	Percent
Much better	4	7.0
Better	36	63.2
Same	17	29.8
Worse	0	0
Total	57	100.0

Developing new organisational structures

	Frequency	Percent
Much better	2	3.5
Better	17	29.8
Same	34	59.6
Worse	4	7.0
Total	57	100.0

Developing new strategies

	Frequency	Percent
Much better	3	5.3
Better	20	35.1
Same	32	56.1
Worse	2	3.5
Total	57	100.0

Developing new systems and processes

	Frequency	Percent
Much better	19	33.3
Better	22	38.6
Same	16	28.1
Worse	0	0
Total	57	100.0

Develop new technology

	Frequency	Percent
Much better	26	45.6
Better	27	47.4
Same	4	7.0
Worse	0	0
Total	57	100.0

Develop income generation

	Frequency	Percent
Much better	9	15.8
Better	26	45.6
Same	21	36.8
Worse	1	1.8
Total	57	100.0

Source – Email Questionnaire

Table 14 – Crosstabulation - If you think NWP is innovative –why? Demands of ACPO - Police Officer/ Police Staff

Why - Demands of ACPO					Total
			Yes	No	
Police Officer/ Police Staff	Police Officer	Count	13	13	26
		% within Police Officer/ Police Staff	50.0%	50.0%	100.0%
	Police Staff	Count	19	12	31
		% within Police Officer/ Police Staff	61.3%	38.7%	100.0%
Total		Count	32	25	57
		% within Police Officer/ Police Staff	56.1%	43.9%	100.0%

Source – Email Questionnaire

Table 15 – Crosstabulation – If you think NWP is innovative – why? Demands of the job - Police Officer/ Police Staff

					Total
			Yes	No	
Police Officer/ Police Staff	Police Officer	Count	7	19	26
		% within Police Officer/ Police Staff	26.9%	73.1%	100.0%
	Police Staff	Count	4	27	31
		% within Police Officer/ Police Staff	12.9%	87.1%	100.0%
Total		Count	11	46	57
		% within Police Officer/ Police Staff	19.3%	80.7%	100.0%

Source – Email Questionnaire

Table 16 Crosstabulation – If you think NWP is innovative, why? Financial freedom - Police Officer/ Police Staff

			Why - financial freedom		Total
			Yes	No	
Police Officer/ Police Staff	Police Officer	Count	12	14	26
		% within Police Officer/ Police Staff	46.2%	53.8%	100.0%
	Police Staff	Count	10	21	31
		% within Police Officer/ Police Staff	32.3%	67.7%	100.0%
Total		Count	22	35	57
		% within Police Officer/ Police Staff	38.6%	61.4%	100.0%

Source – Email Questionnaire

Table 17 Crosstabulation – If you think NWP is innovative, why? Demands of Home Office and Government - Police Officer/ Police Staff

			Why – Home Office		Total
			Yes	No	
Police Officer/ Police Staff	Police Officer	Count	8	18	26
		% within Police Officer/ Police Staff	30.8%	69.2%	100.0%
	Police Staff	Count	4	27	31
		% within Police Officer/ Police Staff	12.9%	87.1%	100.0%
Total		Count	12	45	57
		%	21.1%	78.9%	100.0%

Source – Email Questionnaire

Table 18 Crosstabulation - If you think NWP is innovative, why? Demands of ACPO - How Many Staff Do You Manage?

		Why - demands of ACPO		Total
		Yes	No	
How Many Staff Do You Manage?	0 Count	6	18	24
	% within How Many Staff Do You Manage?	25.0%	75.0%	100.0%
	1-5 Count	13	0	13
	% within How Many Staff Do You Manage?	100.0%	.0%	100.0%
	6 - 20 Count	6	4	10
	% within How Many Staff Do You Manage?	60.0%	40.0%	100.0%
21 +	Count	7	3	10
	% within How Many Staff Do You Manage?	70.0%	30.0%	100.0%
Total	Count	32	25	57
	%	56.1%	43.9%	100.0%

Source – Email Questionnaire

Table 19 Crosstabulation – If you think NWP is innovative – why? Financial Freedom - How Many Staff Do You Manage?

		Why - financial freedom		Total
		Yes	No	
How Many Staff Do You Manage?	0 Count	6	18	24
	% within How Many Staff Do You Manage?	25.0%	75.0%	100.0%
	1-5 Count	4	9	13
	% within How Many Staff Do You Manage?	30.8%	69.2%	100.0%
	6 - 20 Count	7	3	10
	% within How Many Staff Do You Manage?	70.0%	30.0%	100.0%
21 +	Count	5	5	10
	% within How Many Staff Do You Manage?	50.0%	50.0%	100.0%
Total	Count	22	35	57
	% within How Many Staff Do You Manage?	38.6%	61.4%	100.0%

Source – Email Questionnaire

Table 20 Crosstabulation – If you think NWP is innovative, why? Support of senior managers - How Many Staff Do You Manage?

			Why - support of senior managers		Total
			Yes	No	
How Many Staff Do You Manage?	0	Count	10	14	24
		% within How Many Staff Do You Manage?	41.7%	58.3%	100.0%
	1-5	Count	7	6	13
		% within How Many Staff Do You Manage?	53.8%	46.2%	100.0%
	6 - 20	Count	2	8	10
		% within How Many Staff Do You Manage?	20.0%	80.0%	100.0%
	21 +	Count	5	5	10
		% within How Many Staff Do You Manage?	50.0%	50.0%	100.0%
Total		Count	24	33	57
		% within How Many Staff Do You Manage?	42.1%	57.9%	100.0%

Source – Email Questionnaire

Table 21 Crosstabulation – How do you perceive North Wales Police compared to other forces? New approaches to doing the job - Police Officer/ Police Staff

			New approaches to job			Total
			Much better	Better	Same	
Police Officer/ Police Staff	Police Officer	Count	1	20	5	26
		% within Police Officer/ Police Staff	3.8%	76.9%	19.2%	100.0%
	Police Staff	Count	3	16	12	31
		% within Police Officer/ Police Staff	9.7%	51.6%	38.7%	100.0%
Total		Count	4	36	17	57
		% within Police Officer/ Police Staff	7.0%	63.2%	29.8%	100.0%

Source – Email Questionnaire

Table 22 Crosstabulation – How do you perceive North Wales Police compared to other forces? New organisational structures - Police Officer/ Police Staff

			New organisational structures				Total
			Much better	Better	Same	Worse	
Police Officer/ Police Staff	Police Officer	Count	0	12	14	0	26
		% within Police Officer/ Police Staff	.0%	46.2%	53.8%	.0%	100.0%
	Police Staff	Count	2	5	20	4	31
		% within Police Officer/ Police Staff	6.5%	16.1%	64.5%	12.9%	100.0%
Total		Count	2	17	34	4	57
		%	3.5%	29.8%	59.6%	7.0%	100.0%

Source – Email Questionnaire

Table 23 Crosstabulation – How do you perceive NWP compared to other forces? New Systems and Processes - Police Officer/ Police Staff

			New systems and processes			Total
			Much better	Better	Same	
Police Officer/ Police Staff	Police Officer	Count	6	13	7	26
		% within Police Officer/ Police Staff	23.1%	50.0%	26.9%	100.0%
	Police Staff	Count	13	9	9	31
		% within Police Officer/ Police Staff	41.9%	29.0%	29.0%	100.0%
Total		Count	19	22	16	57
		% within Police Officer/ Police Staff	33.3%	38.6%	28.1%	100.0%

Source – Email Questionnaire

Table 24 Crosstabulation – How do you perceive NWP compared to other forces? New organisational structures - How Many Staff Do You Manage?

			New organisational structures				Total
			Much better	Better	Same	Worse	
How Many Staff Do You Manage?	0	Count	0	6	16	2	24
		% within How Many Staff Do You Manage?	.0%	25.0%	66.7%	8.3%	100.0%
	1-5	Count	0	6	5	2	13
		% within How Many Staff Do You Manage?	.0%	46.2%	38.5%	15.4%	100.0%
	6 - 20	Count	2	1	7	0	10
		% within How Many Staff Do You Manage?	20.0%	10.0%	70.0%	.0%	100.0%
	21 +	Count	0	4	6	0	10
		% within How Many Staff Do You Manage?	.0%	40.0%	60.0%	.0%	100.0%
Total		Count	2	17	34	4	57
		% within How Many Staff Do You Manage?	3.5%	29.8%	59.6%	7.0%	

Source – Email Questionnaire

Table 25 Crosstabulation – How do you perceive NWP compared to other forces? New Systems and Processes - How Many Staff Do You Manage?

			New systems and processes			Total
			Much better	Better	Same	
How Many Staff Do You Manage?	0	Count	8	12	4	24
		% within How Many Staff Do You Manage?	33.3%	50.0%	16.7%	100.0%
	1-5	Count	2	5	6	13
		% within How Many Staff Do You Manage?	15.4%	38.5%	46.2%	100.0%
	6 - 20	Count	8	1	1	10
		% within How Many Staff Do You Manage?	80.0%	10.0%	10.0%	100.0%
	21 +	Count	1	4	5	10
		% within How Many Staff Do You Manage?	10.0%	40.0%	50.0%	100.0%
Total		Count	19	22	16	57
		% within How Many Staff Do You Manage?	33.3%	38.6%	28.1%	100.0%

Source – Email Questionnaire

Table 26 Crosstabulation – How do you perceive NWP compared to other forces: New Technology - How Many Staff Do You Manage?

		New technology			Total
		Much better	Better	Same	
How Many Staff Do You Manage?	0				
	Count	12	11	1	24
	% within How Many Staff Do You Manage?	50.0%	45.8%	4.2%	100.0%
	1-5				
	Count	4	8	1	13
	% within How Many Staff Do You Manage?	30.8%	61.5%	7.7%	100.0%
	6 - 20				
	Count	7	3	0	10
	% within How Many Staff Do You Manage?	70.0%	30.0%	.0%	100.0%
	21 +				
	Count	3	5	2	10
	% within How Many Staff Do You Manage?	30.0%	50.0%	20.0%	100.0%
Total	Count	26	27	4	57
	% within How Many Staff Do You Manage?	45.6%	47.4%	7.0%	100.0%

Source – Email Questionnaire